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United States
Department of
Agriculture

Soil Conservation
Service

Beltsville, Maryland

1979 Annual Technical Report of the National Plant Materials Center

A Summary of the Activities
of Calendar Year 1979

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1979 ANNUAL TECHNICAL REPORT
of the
NATIONAL PLANT MATERIALS CENTER

A SUMMARY of the ACTIVITIES
of CALENDAR YEAR 1979

SOIL CONSERVATION SERVICE
U.S. DEPARTMENT of AGRICULTURE
BELTSVILLE, MARYLAND

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National Plant Materials Center
Soil Conservation Service
United States Department of Agriculture

Introduction

1979 marked the 41st year of service by the National Plant Materials Center to the Soil Conservation Service plant materials program as an introduction, exchange, and observation center for grasses, legumes, trees, and shrubs with potential value in soil and water conservation. All plant materials from foreign countries used in the SCS are processed through this center for initial seed increase and observation. An average of 300 new plant accessions per year are introduced through this center and distributed to 21 field plant materials centers throughout the United States, including Alaska, Hawaii, and Puerto Rico.

Plants distributed from this center through the 21 field plant centers eventually are used to help the farmers, ranchers, cities, and urban communities solve the problems of watershed protection, gully control, shelter belts, wind-erosion control, wildlife borders, and surface mine-land reclamation.

Purpose and Objectives

The National Plant Materials Center at Beltsville, Maryland, is the central facility for assembling, increasing, and distributing plant materials from foreign sources that may be useful in helping to solve conservation problems established in the long-range program of the field plant materials centers.

Functions

- Requests, receives, assembles, and, as needed, increases seed and vegetative materials to meet requests of various field PMC's according to priorities established in the long-range program of each PMC.
- Works closely with the Plant Introduction Office, Germplasm Resources Laboratory, SEA, at Beltsville, Maryland, to obtain plant materials needed to fill requests of field PMC's.
- Serves as coordinator for the acquisition of all accessions from regional plant introduction stations for use by field PMC's.

-- Works closely with the Plant Introduction Office, Germplasm Resources Laboratory, SEA, to insure compliance with quarantine restrictions governing the flow of plant materials in and out of the United States.

-- Prepares background information about new plants and other plant materials assembled for distribution.

-- Assembles and distributes seed and plants to meet foreign request.

-- Acts as the coordinating office for plant accessioning and plant performance summaries for the plant materials automatic data processing (ADP) storage and retrieval system.

-- Conducts special projects to help solve problems common to all or several PMC's, such as storage of seed and plants and development of propagation techniques.

-- Maintains contacts for authoritative identification of plant specimens submitted by SCS personnel.

-- Provides for the increase of plant materials for final testing if a field PMC is unable to produce adequate amounts.

Administration

The center is administered by the U. S. Department of Agriculture, Soil Conservation Service. Direction for the operation of the center is provided by an advisory committee appointed by the SCS Administrator. It consists of the director of the Ecological Sciences and Technology Division, who serves as chairman; one state conservationist; one technical service center plant materials specialist; and the director of the Beltsville Agricultural Research Center. The committee meets at least once a year with the NPMC manager and the chief plant materials specialist to provide guidance to the center.

National Plant Materials Center 1979 Advisory Committee:

Thomas N. Shiflet
Director, Ecological Sciences and Technology Division

Gerald R. Calhoun
State Conservationist, Maryland State Office

P. A. Putnum
Acting Director, Beltsville Agricultural Research Center

W. Curtis Sharp
Plant Materials Specialist, Northeast Technical Service
Center

Advisor to NPMC:

Robert S. MacLauchlan
Chief Plant Materials Specialist, Ecological Sciences
and Technology Division

Personnel

Michael McCrary	Manager
William H. Fry	Soil Conservationist
John A. Oyler	Soil Conservationist
Valorie J. Butler	Secretary
Richard C. Russell	Biological Technician
Robert A. Hood	Tractor Operator
Shawn D. Conrad	Biological Aid (Summer)
Kevin Dugard	Biological Aid (Summer)

Employee Development

Pesticide Applicator Certification

John A. Oyler

SCS Secretary Workshop

Valorie J. Butler

Employee Recognition

Letter of Appreciation

Valorie J. Butler
William H. Fry
John A. Oyler

Physical Features

Location:

The center is located on the Beltsville Agricultural Research Center, Beltsville, Maryland. This location is approximately fifteen miles east of the District of Columbia and twenty miles west of Baltimore, Maryland.

Although surrounded by the densely populated metropolitan Washington area, the center's location within the 7,500-acre Agriculture Research Center offers isolation from the mainstream. The entire Agriculture Research Center consists of predominantly hardwood forest with numerous openings and fields.

Climate:

The NPMC is located in a humid, continental-type climate, primarily due to the typical west to east atmospheric flow and 43 inches average annual rainfall. Summer weather is dominated by large masses of warm, moist air spreading northward from the south and southwest. The winter weather is rapidly changed from day to day by alternating high and low pressure systems in the west-east flow.

Temperatures of 90°F or higher occur 40 days per year on the average and 32°F or lower occur on 119 days per year. The average annual precipitation is evenly distributed in a typical year. Summer rainfall of significance is generally from thunderstorms or the occasional tropical storm or hurricane that affects the weather.

The growing season averages 162 days with 50 percent probability that it will begin on April 29 and end of October 9.

Major Land Resource Area:

Although the center lies within the Northern Coastal Plain Land Resource Area, it is very near the separation point between the Northern Coastal Plain LRA and the Northern Piedmont LRA.

Soils and Topography:

Soils on the center consist mostly of sandy loams and loamy sands with areas of silt loam and clay. Complete soils descriptions and soils map are displayed on page 11. The land varies from gently

sloping to moderately sloping. Conservation practices are necessary to prevent erosion. Wind erosion can be severe on the loamy sands unless adequate cover is provided.

Land Area:

The NPMC consists of 140 acres of SCS-owned land. Approximately 80 acres are considered tillable. The majority of the remaining land is in bottomland hardwood forest with a small area of upland hardwood-pine forest. Included in the acreage is a lake covering 17 surface acres. This lake was built about 1940 for irrigation purposes. Beck Branch, a small, year-round stream feeds the lake and meanders through the center's bottomland forest.

Deer, small game, and waterfowl are abundant on the center. Land, not in cultivation, is managed for wildlife according to a conservation plan. Deer and rabbits pose serious threats to observation rows, especially legumes. Groundhogs (woodchucks) cause occasional damage to fields due to their burrowing habit.

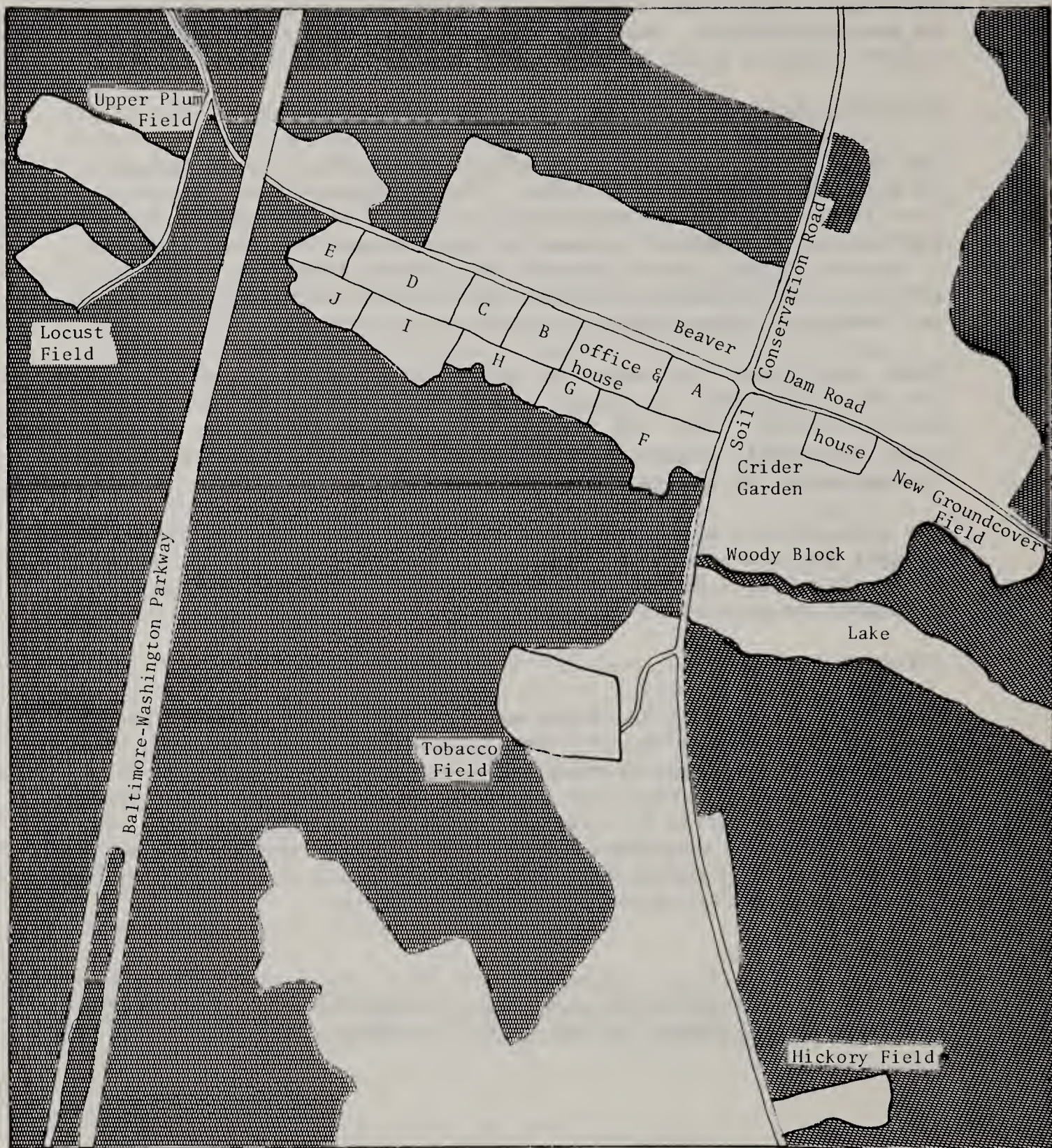
The wide variety of plants being increased on the center presents another problem--observing isolation requirements. To accomplish this, five fields are located from one-half to one mile from the headquarters-greenhouse complex.

Structures:

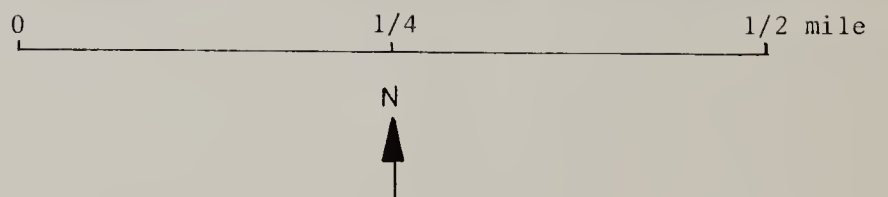
Center buildings consist of the main office (Building 509, located near the intersection of Soil Conservation and Beaver Dam Roads); two 75' x 16' glasshouses with attached headhouse and office space for the biological technician; enclosed garage with 30' x 24' shop area; enclosed garage for tractor and equipment storage; seed processing building; and plant storage building. Also, residences are provided on a rental basis for the manager and assistant manager. These residences are also located on the center.

Irrigation:

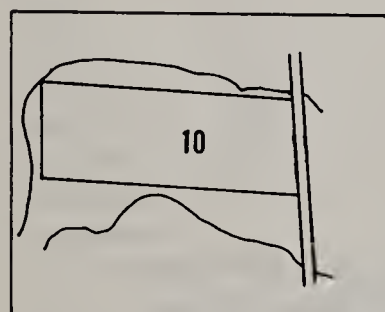
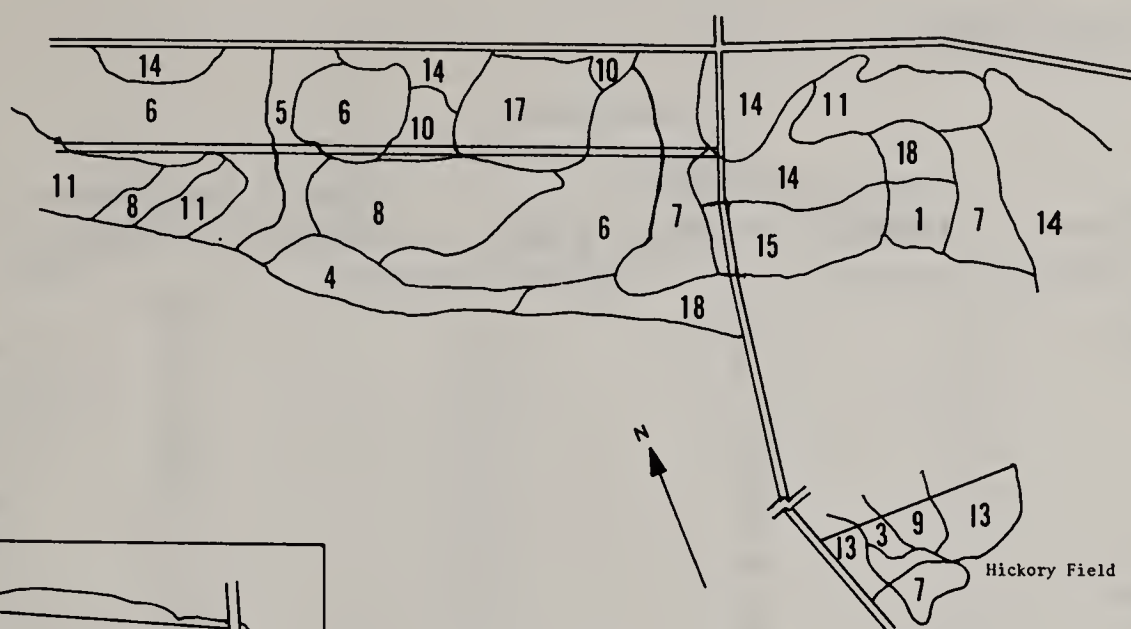
Supplemental irrigation is provided by a portable sprinkler system utilizing fire hydrants as the source of water.



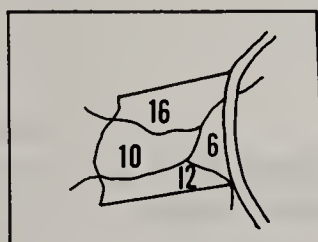
Field Boundary Map



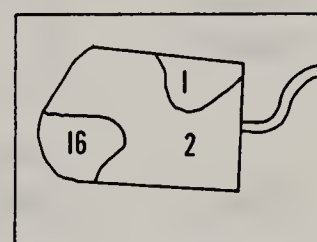
Soils Map and Descriptions



Upper Plum Field



Locust Field



Tobacco Field

- 1 -- Cristiana clay--well drained soils, clayey throughout; most of the surface soil lost through erosion. Capability unit IVe-3. Moderate to strong acidity.
- 2 -- Cristiana fine sandy loam--a deep, well drained red clayey soil with a sandy surface and a very high moisture holding capacity.
- 3 -- Elkton silt loam--poorly drained silt loam over clay or silty clay. Drainage is a major problem. Capability unit IIw-9. Strong to extreme acidity; the water table near the surface much of the year. Suitable for crops if desired.
- 4 -- Elsinboro sandy loam--sand dominant in the surface layer. Well suited to general crops and deep-rooted crops. Capability unit I-S. High moisture holding capacity.
- 5 -- Fallsington sandy loam--poorly drained loams and sandy loams. Capability unit IIw-6. Strongly to extremely acid with moderate moisture holding capacity and moderate fertility. Suitable for farm uses if drained.
- 6 -- Galestown - Evesboro loamy sands--coarse, loose and droughty. Severely limited for farming; protection from wind erosion is necessary. Capability unit IVs-1. Low natural fertility and extreme acidity. Suitable for deep-rooted crops and for shallow-rooted plants if irrigation is supplied when needed.
- 7 -- Iuka sandy loam--moderately well drained, some drainage aids necessary for cropping. Capability unit IIw-7. Moderate to high moisture holding capability. Strongly to extremely acid. Suitable for general farm crops.
- 8 -- Keyport fine sandy loam--moderately well drained sandy, silty, and silty clay loams. Erosion rather than drainage is the prime consideration. Capability units IIe-36 and IIIe-36. Strongly acid, natural fertility medium to low. Well suited to some farm crops when managed.
- 9 -- Matapeake silt loam--well drained. Suitable for most crops including tobacco. Capability unit IIe-4. High moisture holding capacity and good natural fertility.
- 10 -- Muirkirk loamy sand--erosion hazard from the thick sandy surface layer. Capability units IIS-S and IIIe-S. Rapidly permeable, medium to strongly acid, moderate in fertility. Suited to deep-rooted crops only unless irrigated.
- 11 -- Rumford loam sand--medium and coarse sand moderate to dominant in the surface layer. Low in moisture and plant nutrients, but high quality crops can be produced if managed properly. Capability units IIS-4 and IIIe-33. Excessively drained, acid.
- 12 -- Rumford sandy and clayey land--suitable for undemanding farm crops on rotation with long-term pasture or woodland. Dominant sand in the surface layer. Capability units IIIe-41 and IVe-S. Medium to extreme acidity, fertility low to high.
- 13 -- Sassafras sandy loam--moisture holding capacity is good except for prolonged drought. Erosion is likely unless good farm practices are followed, suited to most crops. Capability unit IIe-S. Acid, productive under fertilization. Suitable for most crops.
- 14 -- Sunnyside fine sandy loam--moderate risk of erosion, droughty only during long dry periods. Suited to most crops. Capability units IIe-S and IIIe-S. Acid, require fertilizer for good crops.
- 15 -- Sunnyside sandy clay loam--severely eroded if unprotected. Suitable for hay or pasture only, or woodland. Capability unit VIe-2. Well drained, strong to extreme acidity.
- 16 -- Sunnyside loam--moderately eroded. Suited to general crops and medium quality tobacco. Capability unit IIIe-4. Deep, well drained, medium to strong acidity. Moderate to high natural fertility.
- 17 -- Sunnyside urban land--disturbed land with no capability unit assigned. Variable potential and productivity.
- 18 -- Woodstown sandy loam--moderately well drained. Both erosion control and improved drainage are needed due to seasonally high water table. Capability units IIe-36 and IIIe-36. Moderately coarse textured and strongly acid. Natural fertility is medium to low. Suitable for some crops except where limited by slope.

Weather Data--1979

Temperature

<u>Month</u>	<u>Lowest temperature recorded for month (°F)</u>	<u>Highest temperature recorded for month (°F)</u>
January	-8	62
February	0	43
March	8	79
April	29	76
May	30	88
June	41	86
July	44	91
August	44	94
September	39	87
October	25	83
November	20	73
December	18	67

<u>Month</u>	<u>Mean low for month</u>	<u>Mean high for month</u>	<u>Deviation of 1978 means from 12-year average</u>	
			<u>Low</u>	<u>High</u>
January	22	37	-1	+6
February	12	36	-12	-10
March	30	60	0	+9
April	39	60	+9	-6
May	50	72	0	-2
June	54	78	-4	-4
July	63	83	-1	-4
August	63	84	-2	-1
September	55	77	0	-2
October	42	64	-1	-4
November	36	57	+4	+1
December	26	47	+2	+2

Normal date of last spring freeze -- April 29

Actual date of last spring freeze in 1979 -- May 2

Normal date of first fall freeze -- October 9

Actual date of first fall freeze in 1979 -- October 14

Normal number of freeze-free days -- 162

Actual number of freeze-free days in 1979 -- 162

Precipitation

<u>Month</u>	<u>Precipitation for month (inches)</u>	<u>Deviation from monthly average</u>
January	7.50	+4.68
February	4.20	+1.58
March	2.60	-1.12
April	2.35	-.84
May	4.45	+.48
June	4.15	+.06
July	4.25	-.35
August	7.00	+2.14
September	8.20	+4.88
October	5.55	+2.51
November	2.95	-.25
December	.85	-2.40

Total precipitation recorded in 1979: 54.05 inches

Deviation from average annual precipitation: +11.37 inches

Weather Summary

1979 was both cooler and wetter at the National Plant Materials Center, especially during the months of April through October. During this time each month recorded below normal temperatures and five of the seven months recorded above normal precipitation as compared to 1978 when the months of June through November each recorded below normal precipitation. Total precipitation for 1979 was 54.05 inches, 11.37 inches above normal.

The last spring freeze occurred one day earlier than in 1978 and five days later in the fall than in 1978. The growing season lasted 162 days which is normal.

Plant Materials Received - New Introductions

The National Plant Materials Center maintains a standing request with the Germplasm Resources Laboratory of Science and Education Administration for foreign plant materials needed to fill requests of field plant centers. The NPMC also requests material from numerous foreign researchers.

Normally, material received by the NPMC is in such small amounts that it must be increased before distribution to field PMC's.

1979 Introductions

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Acacia aneura</u>	Fabaceae	<u>Acacia oxycedrus</u>	Fabaceae
<u>Acacia ananeosa</u>	Fabaceae	<u>Acacia parramattensis</u>	Fabaceae
<u>Acacia armata</u>	Fabaceae	<u>Acacia penninervis</u>	Fabaceae
<u>Acacia brachystacha</u>	Fabaceae	<u>Acacia pravissima</u>	Fabaceae
<u>Acacia caesiella</u>	Fabaceae	<u>Acacia pycnantha</u>	Fabaceae
<u>Acacia calamifolia</u>	Fabaceae	<u>Acacia ramulosa</u>	Fabaceae
<u>Acacia campylacantha</u>	Fabaceae	<u>Acacia richi</u>	Fabaceae
<u>Acacia catechu</u>	Fabaceae	<u>Acacia saliciformis</u>	Fabaceae
<u>Acacia clivicola</u>	Fabaceae	<u>Acacia saligna</u>	Fabaceae
<u>Acacia continua</u>	Fabaceae	<u>Acacia scorpioides</u>	Fabaceae
<u>Acacia cupularis</u>	Fabaceae	<u>Acacia sieferana</u>	Fabaceae
<u>Acacia cyclophylla</u>	Fabaceae	<u>Acacia silvertris</u>	Fabaceae
<u>Acacia decurrens</u>	Fabaceae	<u>Acacia suaveolens</u>	Fabaceae
<u>Acacia dunnii</u>	Fabaceae	<u>Acacia subulata</u>	Fabaceae
<u>Acacia extensa</u>	Fabaceae	<u>Acacia terminalis</u>	Fabaceae
<u>Acacia farnesiana</u>	Fabaceae	<u>Acacia trineura</u>	Fabaceae
<u>Acacia graffiana</u>	Fabaceae	<u>Acacia uncinata</u>	Fabaceae
<u>Acacia imbricata</u>	Fabaceae	<u>Acacia verniciflua</u>	Fabaceae
<u>Acacia implexa</u>	Fabaceae	<u>Acacia villosa</u>	Fabaceae
<u>Acacia jonesii</u>	Fabaceae	<u>Acer ginnala</u>	Aceraceae
<u>Acacia linifolia</u>	Fabaceae	<u>Acer glabrum</u>	Aceraceae
<u>Acacia longifolia</u>	Fabaceae	<u>Acer negundo</u>	Aceraceae
<u>Acacia mearnsii</u>	Fabaceae	<u>Acer tataricum</u>	Aceraceae
<u>Acacia microcarpa</u>	Fabaceae	<u>Achillea filipendulina</u>	Asteraceae
<u>Acacia nilotica</u>	Fabaceae	<u>Achillea millefolium</u>	Asteraceae
<u>Acacia notabilis</u>	Fabaceae	<u>Achillea ptarmica</u>	Asteraceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Achillea sibirica</u>	Asteraceae	<u>Armeria juniperifolia</u>	Plumbaginaceae
<u>Agoseris glauca</u>	Asteraceae	<u>Armeria leucocephala</u>	Plumbaginaceae
<u>Agropyron desertorum</u>	Poaceae	<u>Armeria maritima</u>	Plumbaginaceae
<u>Agropyron intermedium</u>	Poaceae	<u>Armeria pseudoarmeria</u>	Plumbaginaceae
<u>Agropyron trachycaulon</u>	Poaceae	<u>Armeria rumelica</u>	Plumbaginaceae
<u>Agrostis alba</u>	Poaceae	<u>Armeria setacea</u>	Plumbaginaceae
<u>Agrostis canina</u>	Poaceae	<u>Artemisia abrotanum</u>	Asteraceae
<u>Agrostis gigantea</u>	Poaceae	<u>Artemisia absinthium</u>	Asteraceae
<u>Agrostis stolonifera</u>	Poaceae	<u>Artemisia argentea</u>	Asteraceae
<u>Agrostis tenuis</u>	Poaceae	<u>Artemisia borealis</u>	Asteraceae
<u>Agrostis vulgaris</u>	Poaceae	<u>Artemisia campestris</u>	Asteraceae
<u>Albizia lophantha</u>	Fabaceae	<u>Artemisia chamaemilifolia</u>	Asteraceae
<u>Alchemilla mollis</u>	Rosaceae	<u>Artemisia dracunculus</u>	Asteraceae
<u>Alnus incana</u>	Betulaceae	<u>Artemisia gorgonum</u>	Asteraceae
<u>Alnus sinuata</u>	Betulaceae	<u>Artemisia ludoviciana</u>	Asteraceae
<u>Alnus tenuifolia</u>	Betulaceae	<u>Artemisia tridendata</u>	Asteraceae
<u>Alopecurus arundinaceus</u>	Poaceae	<u>Artemisia vulgaris</u>	Asteraceae
<u>Alopecurus geniculatus</u>	Poaceae	<u>Asclepias tuberosa</u>	Asclepiadaceae
<u>Alopecurus pratensis</u>	Poaceae	<u>Aster alpinus</u>	Asteraceae
<u>Amelanchier alnifolia</u>	Rosaceae	<u>Aster amellus</u>	Asteraceae
<u>Amelanchier canadensis</u>	Rosaceae	<u>Aster brachyactis</u>	Asteraceae
<u>Ammophila arenaria</u>	Poaceae	<u>Aster conspicuus</u>	Asteraceae
<u>Amorpha fruticosa</u>	Fabaceae	<u>Aster cordifolius</u>	Asteraceae
<u>Anaphalis margaritacea</u>	Asteraceae	<u>Aster dracunculoides</u>	Asteraceae
<u>Anchusa azurea</u>	Boraginaceae	<u>Aster ericoides</u>	Asteraceae
<u>Anthemis tinctoria</u>	Asteraceae	<u>Aster flaccidus</u>	Asteraceae
<u>Antirrhinum majus</u>	Scrophulariaceae	<u>Aster foliaceus</u>	Asteraceae
<u>Arctostaphylos uva-ursi</u>	Ericaceae	<u>Aster laevis</u>	Asteraceae
<u>Arenaria montana</u>	Caryophyllaceae	<u>Aster lanceolatus</u>	Asteraceae
<u>Aristida contorta</u>	Poaceae	<u>Aster lateriflorus</u>	Asteraceae
<u>Armeria canescens</u>	Plumbaginaceae	<u>Aster lautureanus</u>	Asteraceae
<u>Armeria cinerea</u>	Plumbaginaceae	<u>Aster linosyris</u>	Asteraceae
<u>Armeria x formosa</u>	Plumbaginaceae	<u>Aster novae-angliae</u>	Asteraceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Aster pansus</u>	Asteraceae	<u>Atriplex calotheca</u>	Chenopodiaceae
<u>Aster pappei</u>	Asteraceae	<u>Atriplex canescens</u>	Chenopodiaceae
<u>Aster punctatus</u>	Asteraceae	<u>Atriplex cordifolia</u>	Chenopodiaceae
<u>Aster pyrenaeus</u>	Asteraceae	<u>Atriplex glauca</u>	Chenopodiaceae
<u>Aster salicifolius</u>	Asteraceae	<u>Atriplex hortensis</u>	Chenopodiaceae
<u>Aster sedifolius</u>	Asteraceae	<u>Atriplex laciniata</u>	Chenopodiaceae
<u>Aster sibiricus</u>	Asteraceae	<u>Atriplex latifolia</u>	Chenopodiaceae
<u>Aster simplex</u>	Asteraceae	<u>Atriplex lindleyi</u>	Chenopodiaceae
<u>Aster squamatus</u>	Asteraceae	<u>Atriplex littoralis</u>	Chenopodiaceae
<u>Aster subcoeruleus</u>	Asteraceae	<u>Atriplex patula</u>	Chenopodiaceae
<u>Aster thomsonii</u>	Asteraceae	<u>Atriplex rosea</u>	Chenopodiaceae
<u>Aster tongolensis</u>	Asteraceae	<u>Atriplex suberecta</u>	Chenopodiaceae
<u>Aster tripolium</u>	Asteraceae	<u>Atriplex vesicaria</u>	Chenopodiaceae
<u>Aster umbellatus</u>	Asteraceae	<u>Aurinia saxatilis</u>	Brassicaceae
<u>Astragalus alpinus</u>	Fabaceae	<u>Balsamorhiza bookeri</u>	Asteraceae
<u>Astragalus americanus</u>	Fabaceae	<u>Baptisia australis</u>	Fabaceae
<u>Astragalus boeoticus</u>	Fabaceae	<u>Bauhinia galpinii</u>	Fabaceae
<u>Astragalus centralpinus</u>	Fabaceae	<u>Beckmannia eruciformis</u>	Poaceae
<u>Astragalus cicer</u>	Fabaceae	<u>Belamcanda chinensis</u>	Iridaceae
<u>Astragalus contortuplicatus</u>	Fabaceae	<u>Betula glandulosa</u>	Betulaceae
<u>Astragalus cymbicarpos</u>	Fabaceae	<u>Betula nana</u>	Betulaceae
<u>Astragalus danicus</u>	Fabaceae	<u>Betula occidentalis</u>	Betulaceae
<u>Astragalus falcatus</u>	Fabaceae	<u>Betula papyrifera</u>	Betulaceae
<u>Astragalus frigidus</u>	Fabaceae	<u>Betula pendula</u>	Betulaceae
<u>Astragalus glycyphyllos</u>	Fabaceae	<u>Biota orientalis</u>	Cupressaceae
<u>Astragalus hamosus</u>	Fabaceae	<u>Biserrula pelicina</u>	Fabaceae
<u>Astragalus neglectus</u>	Fabaceae	<u>Brassica juncea</u>	Brassicaceae
<u>Astragalus norvegicus</u>	Fabaceae	<u>Brassica napus</u>	Brassicaceae
<u>Astragalus penduliflorus</u>	Fabaceae	<u>Brassica rapa</u>	Brassicaceae
<u>Astragalus pentaglottis</u>	Fabaceae	<u>Bromus ciliatus</u>	Poaceae
<u>Astragalus robbinsii</u>	Fabaceae	<u>Bromus commutatus</u>	Poaceae
<u>Astragalus sesameus</u>	Fabaceae	<u>Bromus erectus</u>	Poaceae
<u>Astragalus trimestris</u>	Fabaceae	<u>Bromus hordeaceus</u>	Poaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Bromus inermis</u>	Poaceae	<u>Campanula persicifolia</u>	Campanulaceae
<u>Bromus mollis</u>	Poaceae	<u>Campanula rotundifolia</u>	Campanulaceae
<u>Bromus racemosus</u>	Poaceae	<u>Caragana arborescens</u>	Fabaceae
<u>Bromus ramosus</u>	Poaceae	<u>Caragana boissii</u>	Fabaceae
<u>Bromus secalinus</u>	Poaceae	<u>Caragana decorticans</u>	Fabaceae
<u>Bromus sitchensis</u>	Poaceae	<u>Caragana frutex</u>	Fabaceae
<u>Bromus unioloides</u>	Poaceae	<u>Caragana grandiflora</u>	Fabaceae
<u>Bromus valdiviensis</u>	Poaceae	<u>Carex arenaria</u>	Cyperaceae
<u>Bupthalmum salicifolium</u>	Asteraceae	<u>Carex buxbaumii</u>	Cyperaceae
<u>Caesalpinia clementis</u>	Fabaceae	<u>Carex crinita</u>	Cyperaceae
<u>Caesalpinia sappan</u>	Fabaceae	<u>Carex disticha</u>	Cyperaceae
<u>Caesalpinia violacea</u>	Fabaceae	<u>Carex divulsa</u>	Cyperaceae
<u>Calamagrostis arundinacea</u>	Poaceae	<u>Carex echinata</u>	Cyperaceae
<u>Calamagrostis canadensis</u>	Poaceae	<u>Carex filiformis</u>	Cyperaceae
<u>Calamagrostis epigetos</u>	Poaceae	<u>Carex flacca</u>	Cyperaceae
<u>Calamagrostis pseudophragmites</u>	Poaceae	<u>Carex hirta</u>	Cyperaceae
<u>Calendula officinalis</u>	Asteraceae	<u>Carex lepidocarpa</u>	Cyperaceae
<u>Callistemon citrinus</u>	Myrtaceae	<u>Carex limosa</u>	Cyperaceae
<u>Callistemon linearis</u>	Myrtaceae	<u>Carex nigra</u>	Cyperaceae
<u>Callistemon macropunctatus</u>	Myrtaceae	<u>Carex otrubae</u>	Cyperaceae
<u>Callistemon phoeniceus</u>	Myrtaceae	<u>Carex panicea</u>	Cyperaceae
<u>Callistemon rigidus</u>	Myrtaceae	<u>Carex paupercula</u>	Cyperaceae
<u>Callistemon salignus</u>	Myrtaceae	<u>Carex pendula</u>	Cyperaceae
<u>Calluna vulgaris</u>	Ericaceae	<u>Carex polyphylla</u>	Cyperaceae
<u>Calothamnus asper</u>	Myrtaceae	<u>Carex pseudocyperus</u>	Cyperaceae
<u>Calothamnus gilesii</u>	Myrtaceae	<u>Carex pulicaris</u>	Cyperaceae
<u>Calothamnus homalophyllus</u>	Myrtaceae	<u>Carex remota</u>	Cyperaceae
<u>Calothamnus lateralalis</u>	Myrtaceae	<u>Carex retrorsa</u>	Cyperaceae
<u>Calothamnus quadifidus</u>	Myrtaceae	<u>Carex scaposa</u>	Cyperaceae
<u>Calothamnus validus</u>	Myrtaceae	<u>Carex spicata</u>	Cyperaceae
<u>Calytrix brachyphylla</u>	Myrtaceae	<u>Carex vulpinoidea</u>	Cyperaceae
<u>Campanula latifolia</u>	Campanulaceae	<u>Carpinus caroliniana</u>	Betulaceae
		<u>Cassia aciphylla</u>	Fabaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Cassia artemisioides</u>	Fabaceae	<u>Chrysanthemum carinatum</u>	Asteraceae
<u>Cassia brewsteri</u>	Fabaceae	<u>Chrysanthemum coronarium</u>	Asteraceae
<u>Cassia nemophila</u>	Fabaceae	<u>Chrysanthemum leucanthemum</u>	Asteraceae
<u>Cassia odorata</u>	Fabaceae	<u>Chrysanthemum segetum</u>	Asteraceae
<u>Cassia pleurocarpa</u>	Fabaceae	<u>Chrysothamnus nauseosus</u>	Asteraceae
<u>Cassia sturtii</u>	Fabaceae	<u>Cichorium intybus</u>	Asteraceae
<u>Castilleja miniata</u>	Scrophulariaceae	<u>Clematis microphylla</u>	Ranunculaceae
<u>Casuarina acutivalvis</u>	Casuarinaceae	<u>Clematis serrulata</u>	Ranunculaceae
<u>Casuarina corniculata</u>	Casuarinaceae	<u>Collinsia bicolor</u>	Scrophulariaceae
<u>Casuarina helmsii</u>	Casuarinaceae	<u>Collinsia heterophylla</u>	Scrophulariaceae
<u>Ceanothus americanus</u>	Rhamnaceae	<u>Coreopsis lanceolata</u>	Asteraceae
<u>Ceanothus fendleri</u>	Rhamnaceae	<u>Cornus alba</u>	Cornaceae
<u>Ceanothus foliosus</u>	Rhamnaceae	<u>Cornus alternifolia</u>	Cornaceae
<u>Ceanothus impressus</u>	Rhamnaceae	<u>Cornus sanguinea</u>	Cornaceae
<u>Ceanothus sanguineus</u>	Rhamnaceae	<u>Cornus stolonifera</u>	Cornaceae
<u>Ceanothus thyrsiflorus</u>	Rhamnaceae	<u>Cornus suecica</u>	Cornaceae
<u>Ceanothus velutinus</u>	Rhamnaceae	<u>Coronilla argentea</u>	Fabaceae
<u>Celtis australis</u>	Ulmaceae	<u>Coronilla coronata</u>	Fabaceae
<u>Celtis occidentalis</u>	Ulmaceae	<u>Coronilla emerus</u>	Fabaceae
<u>Celtis reticulata</u>	Ulmaceae	<u>Coronilla glauca</u>	Fabaceae
<u>Celtis sinensis</u>	Ulmaceae	<u>Coronilla juncea</u>	Fabaceae
<u>Celtis tenuifolia</u>	Ulmaceae	<u>Coronilla minima</u>	Fabaceae
<u>Centaurea cyanus</u>	Asteraceae	<u>Coronilla parviflora</u>	Fabaceae
<u>Centaurea dealbata</u>	Asteraceae	<u>Coronilla scorpioides</u>	Fabaceae
<u>Centaurea montana</u>	Asteraceae	<u>Coronilla valentina</u>	Fabaceae
<u>Cercis siliquastrum</u>	Fabaceae	<u>Coronilla varia</u>	Fabaceae
<u>Chaenomeles japonica</u>	Rosaceae	<u>Corydalis sempervirens</u>	Fumariaceae
<u>Chamaecyparis pisifera</u>	Cupressaceae	<u>Cotoneaster acutifolia</u>	Rosaceae
<u>Chamaedaphne calyculata</u>	Ericaceae	<u>Cotoneaster adpressa</u>	Rosaceae
<u>Chasmanthium latifolium</u>	Poaceae	<u>Cotoneaster affinis</u>	Rosaceae
<u>Cheiranthus x allionii</u>	Brassicaceae	<u>Cotoneaster ambigua</u>	Rosaceae
<u>Chenopodium bonus-henricus</u>	Chenopodiaceae	<u>Cotoneaster amoenus</u>	Rosaceae
<u>Chrysanthemum balsamita</u>	Asteraceae	<u>Cotoneaster apiculata</u>	Rosaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Cotoneaster bullata</u>	Rosaceae	<u>Desmodium canadensis</u>	Fabaceae
<u>Cotoneaster congesta</u>	Rosaceae	<u>Diervilla lonicera</u>	Caprifoliaceae
<u>Cotoneaster conspicua</u>	Rosaceae	<u>Diervilla sessilifolia</u>	Caprifoliaceae
<u>Cotoneaster dammeri</u>	Rosaceae	<u>Digitalis purpurea</u>	Scrophulariaceae
<u>Cotoneaster dielsiana</u>	Rosaceae	<u>Dodonaea lobulata</u>	Sapindaceae
<u>Cotoneaster franchetti</u>	Rosaceae	<u>Dodonaea microzyga</u>	Sapindaceae
<u>Cotoneaster harrysmithii</u>	Rosaceae	<u>Dodonaea stenozyga</u>	Sapindaceae
<u>Cotoneaster hebeophylla</u>	Rosaceae	<u>Dolichos bicontortus</u>	Fabaceae
<u>Cotoneaster henryana</u>	Rosaceae	<u>Dolichos cebra</u>	Fabaceae
<u>Cotoneaster horizontalis</u>	Rosaceae	<u>Dolichos lablab</u>	Fabaceae
<u>Cotoneaster integerrima</u>	Rosaceae	<u>Dolichos levcomelas</u>	Fabaceae
<u>Cotoneaster microphylla</u>	Rosaceae	<u>Dolichos ornatus</u>	Fabaceae
<u>Cotoneaster niger</u>	Rosaceae	<u>Dolichos sesquipedalis</u>	Fabaceae
<u>Cotoneaster nigra</u>	Rosaceae	<u>Dryas drummondii</u>	Rosaceae
<u>Cotoneaster salicifolia</u>	Rosaceae	<u>Dryas octopetala</u>	Rosaceae
<u>Cotoneaster splendens</u>	Rosaceae	<u>Echinacea purpurea</u>	Asteraceae
<u>Cotoneaster sternianus</u>	Rosaceae	<u>Elaeagnus angustifolia</u>	Elaeagnaceae
<u>Cotoneaster wardii</u>	Rosaceae	<u>Elaeagnus commutata</u>	Elaeagnaceae
<u>Cotoneaster x wateri</u>	Rosaceae	<u>Elymus arenarius</u>	Poaceae
<u>Crataegus douglasii</u>	Rosaceae	<u>Elymus sibiricus</u>	Poaceae
<u>Crataegus intricata</u>	Rosaceae	<u>Elymus virginicus</u>	Poaceae
<u>Crepis capillaris</u>	Asteraceae	<u>Empetrum nigrum</u>	Empetraceae
<u>Crotalaria crassipes</u>	Fabaceae	<u>Enkianthus campanulatus</u>	Ericaceae
<u>Cupressus benthamii</u>	Cupressaceae	<u>Epilobium adenocaulon</u>	Onagraceae
<u>Dactylis glomerata</u>	Poaceae	<u>Epilobium anagallidifolium</u>	Onagraceae
<u>Dactylis polygama</u>	Poaceae	<u>Epilobium angustifolium</u>	Onagraceae
<u>Danthonia spicata</u>	Poaceae	<u>Epilobium ciliatum</u>	Onagraceae
<u>Daphne mezereum</u>	Thymelaeaceae	<u>Epilobium glandulosum</u>	Onagraceae
<u>Delphinium ajacis</u>	Ranunculaceae	<u>Epilobium hornemannii</u>	Onagraceae
<u>Delphinium ambiguum</u>	Ranunculaceae	<u>Epilobium latifolium</u>	Onagraceae
<u>Delphinium orientale</u>	Ranunculaceae	<u>Epilobium leptophyllum</u>	Onagraceae
<u>Deschampsia cespitosa</u>	Poaceae	<u>Eragrostis speciosa</u>	Poaceae
<u>Deschampsia flexuosa</u>	Poaceae	<u>Erigeron acer</u>	Asteraceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Erigeron borealis</u>	Asteraceae	<u>Eucalyptus fraxinoides</u>	Myrtaceae
<u>Erigeron compositus</u>	Asteraceae	<u>Eucalyptus gillii</u>	Myrtaceae
<u>Erigeron humilis</u>	Asteraceae	<u>Eucalyptus glaucescens</u>	Myrtaceae
<u>Erigeron pumilus</u>	Asteraceae	<u>Eucalyptus gongylocarpa</u>	Myrtaceae
<u>Erigeron speciosus</u>	Asteraceae	<u>Eucalyptus goniantha</u>	Myrtaceae
<u>Erysimum hieraciifolium</u>	Brassicaceae	<u>Eucalyptus goniocalyx</u>	Myrtaceae
<u>Eschscholzia californica</u>	Papaveraceae	<u>Eucalyptus gracilis</u>	Myrtaceae
<u>Eucalyptus agglomerata</u>	Myrtaceae	<u>Eucalyptus gregsoniana</u>	Myrtaceae
<u>Eucalyptus alba</u>	Myrtaceae	<u>Eucalyptus haemastoma</u>	Myrtaceae
<u>Eucalyptus amplifolia</u>	Myrtaceae	<u>Eucalyptus incrassata</u>	Myrtaceae
<u>Eucalyptus anceps</u>	Myrtaceae	<u>Eucalyptus kybeanensis</u>	Myrtaceae
<u>Eucalyptus andrewsii</u>	Myrtaceae	<u>Eucalyptus laevopinea</u>	Myrtaceae
<u>Eucalyptus angulosa</u>	Myrtaceae	<u>Eucalyptus langleyi</u>	Myrtaceae
<u>Eucalyptus annulata</u>	Myrtaceae	<u>Eucalyptus lansdowneana</u>	Myrtaceae
<u>Eucalyptus apiculata</u>	Myrtaceae	<u>Eucalyptus lehmanni</u>	Myrtaceae
<u>Eucalyptus calycogona</u>	Myrtaceae	<u>Eucalyptus leucoxylon</u>	Myrtaceae
<u>Eucalyptus camaldulensis</u>	Myrtaceae	<u>Eucalyptus ligustrina</u>	Myrtaceae
<u>Eucalyptus campaspe</u>	Myrtaceae	<u>Eucalyptus longicornis</u>	Myrtaceae
<u>Eucalyptus cloeziana</u>	Myrtaceae	<u>Eucalyptus longifolia</u>	Myrtaceae
<u>Eucalyptus conglobata</u>	Myrtaceae	<u>Eucalyptus macarthurii</u>	Myrtaceae
<u>Eucalyptus considiniana</u>	Myrtaceae	<u>Eucalyptus macrocarpa</u>	Myrtaceae
<u>Eucalyptus cosmophylla</u>	Myrtaceae	<u>Eucalyptus maculata</u>	Myrtaceae
<u>Eucalyptus cypellocarpa</u>	Myrtaceae	<u>Eucalyptus meintyrensis</u>	Myrtaceae
<u>Eucalyptus dalrympleana</u>	Myrtaceae	<u>Eucalyptus megacornuta</u>	Myrtaceae
<u>Eucalyptus diversifolia</u>	Myrtaceae	<u>Eucalyptus melliodora</u>	Myrtaceae
<u>Eucalyptus dives</u>	Myrtaceae	<u>Eucalyptus michaeliana</u>	Myrtaceae
<u>Eucalyptus dumosa</u>	Myrtaceae	<u>Eucalyptus morrisii</u>	Myrtaceae
<u>Eucalyptus elata</u>	Myrtaceae	<u>Eucalyptus multicaulis</u>	Myrtaceae
<u>Eucalyptus ewartiana</u>	Myrtaceae	<u>Eucalyptus neglecta</u>	Myrtaceae
<u>Eucalyptus eximia</u>	Myrtaceae	<u>Eucalyptus obliqua</u>	Myrtaceae
<u>Eucalyptus fastigata</u>	Myrtaceae	<u>Eucalyptus oblonga</u>	Myrtaceae
<u>Eucalyptus foecunda</u>	Myrtaceae	<u>Eucalyptus oleosa</u>	Myrtaceae
<u>Eucalyptus forrestiana</u>	Myrtaceae	<u>Eucalyptus olsenii</u>	Myrtaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Eucalyptus oreades</u>	Myrtaceae	<u>Genista monosperma</u>	Fabaceae
<u>Eucalyptus oxymitra</u>	Myrtaceae	<u>Geranium robertianum</u>	Geraniaceae
<u>Eucalyptus pauciflora</u>	Myrtaceae	<u>Gilia achilleifolia</u>	Polemoniaceae
<u>Eucalyptus pileata</u>	Myrtaceae	<u>Gilia capitata</u>	Polemoniaceae
<u>Eucalyptus pimpiniata</u>	Myrtaceae	<u>Gleditsia triacanthos</u>	Fabaceae
<u>Eucalyptus piperita</u>	Myrtaceae	<u>Glyceria grandis</u>	Poaceae
<u>Eucalyptus platypus</u>	Myrtaceae	<u>Hedysarum alpinum</u>	Fabaceae
<u>Eucalyptus porosa</u>	Myrtaceae	<u>Hedysarum coronarium</u>	Fabaceae
<u>Eucalyptus punctata</u>	Myrtaceae	<u>Hedysarum flexuosum</u>	Fabaceae
<u>Eucalyptus pyriformis</u>	Myrtaceae	<u>Hedysarum spinosissimum</u>	Fabaceae
<u>Eucalyptus radiata</u>	Myrtaceae	<u>Helenium bigelovii</u>	Asteraceae
<u>Eucalyptus saligna</u>	Myrtaceae	<u>Helianthus annuus</u>	Asteraceae
<u>Eucalyptus sclerophylla</u>	Myrtaceae	<u>Helianthus laetiflorus</u>	Asteraceae
<u>Eucalyptus sessilis</u>	Myrtaceae	<u>Helianthus tuberosus</u>	Asteraceae
<u>Eucalyptus sieberi</u>	Myrtaceae	<u>Hesperis matronalis</u>	Brassicaceae
<u>Eucalyptus socialis</u>	Myrtaceae	<u>Heteropappus altaicus</u>	Asteraceae
<u>Eucalyptus stellulata</u>	Myrtaceae	<u>Hippophae rhamnoides</u>	Elaeagnaceae
<u>Eucalyptus striatocalyx</u>	Myrtaceae	<u>Holodiscus discolor</u>	Rosaceae
<u>Eucalyptus stricta</u>	Myrtaceae	<u>Holodiscus dumosus</u>	Rosaceae
<u>Eucalyptus tetragona</u>	Myrtaceae	<u>Hypericum ascyon</u>	Clusiaceae
<u>Eucalyptus torquata</u>	Myrtaceae	<u>Hypericum beanii</u>	Clusiaceae
<u>Eucalyptus viridis</u>	Myrtaceae	<u>Hypochoeris radicata</u>	Asteraceae
<u>Eucalyptus wandoo</u>	Myrtaceae	<u>Iberis sempervirens</u>	Brassicaceae
<u>Euonymus alatus</u>	Celastraceae	<u>Impatiens biflora</u>	Balsaminaceae
<u>Euonymus radicans</u>	Celastraceae	<u>Impatiens noli-tangere</u>	Balsaminaceae
<u>Fallugia paradoxa</u>	Rosaceae	<u>Iris missouriensis</u>	Iridaceae
<u>Festuca rubra</u>	Poaceae	<u>Iris setosa</u>	Iridaceae
<u>Filipendula hexapetala</u>	Rosaceae	<u>Isopogon ceatophyllus</u>	Proteaceae
<u>Frangula alnus</u>	Rhamnaceae	<u>Isopogon cuneatus</u>	Proteaceae
<u>Fraxinus pennsylvanica</u>	Oleaceae	<u>Isopogon teretifolius</u>	Proteaceae
<u>Gaillardia aristata</u>	Asteraceae	<u>Juniperus chinensis</u>	Cupressaceae
<u>Gaillardia pulchella</u>	Asteraceae	<u>Juniperus communis</u>	Cupressaceae
<u>Galega officinalis</u>	Fabaceae	<u>Juniperus lucayana</u>	Cupressaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Juniperus osteosperma</u>	Cupressaceae	<u>Linum perenne</u>	Linaceae
<u>Juniperus oxycedrus</u>	Cupressaceae	<u>Lobelia cardinalis</u>	Campanulaceae
<u>Juniperus phoenicea</u>	Cupressaceae	<u>Loiseleuria procumbens</u>	Ericaceae
<u>Juniperus sabina</u>	Cupressaceae	<u>Lolium multiflorum</u>	Poaceae
<u>Juniperus scopulorum</u>	Cupressaceae	<u>Lolium perenne</u>	Poaceae
<u>Juniperus virginiana</u>	Cupressaceae	<u>Lolium temulentum</u>	Poaceae
<u>Juniperus wallichiana</u>	Cupressaceae	<u>Lonicera chrysantha</u>	Caprifoliaceae
<u>Kalmia latifolia</u>	Ericaceae	<u>Lonicera maackii</u>	Caprifoliaceae
<u>Kennedia prostrata</u>	Fabaceae	<u>Lonicera tatarica</u>	Caprifoliaceae
<u>Kunzea ambigua</u>	Myrtaceae	<u>Lotus corniculatus</u>	Fabaceae
<u>Kunzea baxteri</u>	Myrtaceae	<u>Lotus tenuis</u>	Fabaceae
<u>Larix decidua</u>	Pinaceae	<u>Lotus uliginosus</u>	Fabaceae
<u>Lathyrus cicera</u>	Fabaceae	<u>Lupinus alba</u>	Fabaceae
<u>Lathyrus japonicus</u>	Fabaceae	<u>Lupinus angustifolius</u>	Fabaceae
<u>Lathyrus latifolius</u>	Fabaceae	<u>Lupinus arboreus</u>	Fabaceae
<u>Lathyrus ochrus</u>	Fabaceae	<u>Lupinus luteus</u>	Fabaceae
<u>Lathyrus palustris</u>	Fabaceae	<u>Lupinus mutabilis</u>	Fabaceae
<u>Lathyrus sylvestris</u>	Fabaceae	<u>Lupinus nootkatensis</u>	Fabaceae
<u>Lathyrus vernus</u>	Fabaceae	<u>Lupinus polyphyllus</u>	Fabaceae
<u>Leersia oryzoides</u>	Poaceae	<u>Lychnis chalcedonica</u>	Caryophyllaceae
<u>Leptospermum coriaceum</u>	Myrtaceae	<u>Lycium chinense</u>	Solanaceae
<u>Leptospermum erubescens</u>	Myrtaceae	<u>Lythrum salicaria</u>	Lythraceae
<u>Leptospermum glabrescens</u>	Myrtaceae	<u>Magnolia macrophylla</u>	Magnoliaceae
<u>Leptospermum juniperinum</u>	Myrtaceae	<u>Malus baccata</u>	Rosaceae
<u>Leptospermum myrsinoides</u>	Myrtaceae	<u>Malus sylvestris</u>	Rosaceae
<u>Leptospermum petersonii</u>	Myrtaceae	<u>Malva moschata</u>	Malvaceae
<u>Leucaena latisilqua</u>	Fabaceae	<u>Malva sylvestris</u>	Malvaceae
<u>Liatris punctata</u>	Asteraceae	<u>Medicago echinus</u>	Fabaceae
<u>Liatris spicata</u>	Asteraceae	<u>Medicago falcata</u>	Fabaceae
<u>Ligusticum scoticum</u>	Umbelliferae	<u>Medicago hispida</u>	Fabaceae
<u>Ligustrum vulgare</u>	Oleaceae	<u>Medicago lupulina</u>	Fabaceae
<u>Limnanthes douglasii</u>	Limnanthaceae	<u>Medicago polymorpha</u>	Fabaceae
<u>Lindelofia longiflora</u>	Boraginaceae	<u>Medicago sativa</u>	Fabaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Melaleuca acuminata</u>	Myrtaceae	<u>Monarda fistulosa</u>	Lamiaceae
<u>Melaleuca corrugata</u>	Myrtaceae	<u>Nemophila menziesii</u>	Hydrophyllaceae
<u>Melaleuca diosmifolia</u>	Myrtaceae	<u>Nicotiana velutina</u>	Solanaceae
<u>Melaleuca eleutherostachya</u>	Myrtaceae	<u>Oenothera biennis</u>	Onagraceae
<u>Melaleuca elliptica</u>	Myrtaceae	<u>Orthocarpus hispidus</u>	Scrophulariaceae
<u>Melaleuca ericifolia</u>	Myrtaceae	<u>Oxytropis campestris</u>	Fabaceae
<u>Melaleuca hamulosa</u>	Myrtaceae	<u>Papaver alboroseum</u>	Papaveraceae
<u>Melaleuca huegelii</u>	Myrtaceae	<u>Papaver nudicaule</u>	Papaveraceae
<u>Melaleuca hypericifolia</u>	Myrtaceae	<u>Papaver rhoeas</u>	Papaveraceae
<u>Melaleuca lanceolata</u>	Myrtaceae	<u>Paspalum dilatatum</u>	Poaceae
<u>Melaleuca lateritia</u>	Myrtaceae	<u>Paspalum prostratum</u>	Poaceae
<u>Melaleuca microphylla</u>	Myrtaceae	<u>Paspalum scorbiculum</u>	Poaceae
<u>Melaleuca oraria</u>	Myrtaceae	<u>Paspalum stoloniferum</u>	Poaceae
<u>Melaleuca pentagona</u>	Myrtaceae	<u>Paspalum urvillea</u>	Poaceae
<u>Melaleuca platycalyx</u>	Myrtaceae	<u>Paspalum vaginatum</u>	Poaceae
<u>Melaleuca pungens</u>	Myrtaceae	<u>Penstemon acuminatus</u>	Scrophulariaceae
<u>Melaleuca serpyllifolia</u>	Myrtaceae	<u>Penstemon affinis</u>	Scrophulariaceae
<u>Melaleuca sheathiana</u>	Myrtaceae	<u>Penstemon barbatus</u>	Scrophulariaceae
<u>Melaleuca striata</u>	Myrtaceae	<u>Penstemon calycosus</u>	Scrophulariaceae
<u>Melaleuca styphelioides</u>	Myrtaceae	<u>Penstemon campanulatus</u>	Scrophulariaceae
<u>Melaleuca subfalcata</u>	Myrtaceae	<u>Penstemon confertus</u>	Scrophulariaceae
<u>Melaleuca thyoides</u>	Myrtaceae	<u>Penstemon cordifolius</u>	Scrophulariaceae
<u>Melaleuca uncinata</u>	Myrtaceae	<u>Penstemon diffusus</u>	Scrophulariaceae
<u>Melaleuca urceolaris</u>	Myrtaceae	<u>Penstemon eatonii</u>	Scrophulariaceae
<u>Melaleuca viminea</u>	Myrtaceae	<u>Penstemon glaber</u>	Scrophulariaceae
<u>Melaleuca wilsonii</u>	Myrtaceae	<u>Penstemon glaucus</u>	Scrophulariaceae
<u>Melilotus alba</u>	Fabaceae	<u>Penstemon gormanii</u>	Scrophulariaceae
<u>Melilotus officinalis</u>	Fabaceae	<u>Penstemon gracilis</u>	Scrophulariaceae
<u>Mimulus guttatus</u>	Scrophulariaceae	<u>Penstemon grandiflorus</u>	Scrophulariaceae
<u>Mimulus lewisii</u>	Scrophulariaceae	<u>Penstemon laevigatus</u>	Scrophulariaceae
<u>Mimulus luteus</u>	Scrophulariaceae	<u>Penstemon murrayanus</u>	Scrophulariaceae
<u>Miscanthus sinensis</u>	Poaceae	<u>Penstemon ovatus</u>	Scrophulariaceae
<u>Misopates orontium</u>	Scrophulariaceae	<u>Penstemon procerus</u>	Scrophulariaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Penstemon richardsonii</u>	Scrophulariaceae	<u>Pinus pinaster</u>	Pinaceae
<u>Penstemon venustus</u>	Scrophulariaceae	<u>Pinus pinea</u>	Pinaceae
<u>Penstemon watsonii</u>	Scrophulariaceae	<u>Pinus ponderosa</u>	Pinaceae
<u>Phacelia sericea</u>	Hydrophyllaceae	<u>Pinus strobus</u>	Pinaceae
<u>Phacelia tanacetifolia</u>	Hydrophyllaceae	<u>Pinus taeda</u>	Pinaceae
<u>Phalaris aquatica</u>	Poaceae	<u>Pinus wallichiana</u>	Pinaceae
<u>Phalaris arundinacea</u>	Poaceae	<u>Poa alpina</u>	Poaceae
<u>Phalaris canariensis</u>	Poaceae	<u>Poa angustifolia</u>	Poaceae
<u>Phalaris minor</u>	Poaceae	<u>Poa compressa</u>	Poaceae
<u>Philadelphus coronarius</u>	Philadelphaceae	<u>Poa glauca</u>	Poaceae
<u>Philadelphus lewesii</u>	Philadelphaceae	<u>Poa nemoralis</u>	Poaceae
<u>Philadelphus tenuifolius</u>	Philadelphaceae	<u>Poa palustris</u>	Poaceae
<u>Photina villosa</u>	Rosaceae	<u>Poa pratensis</u>	Poaceae
<u>Phragmites australis</u>	Poaceae	<u>Poa subcaerulea</u>	Poaceae
<u>Physocarpus amurensis</u>	Rosaceae	<u>Poa trivialis</u>	Poaceae
<u>Physocarpus monogynus</u>	Rosaceae	<u>Polemonium coeruleum</u>	Polemoniaceae
<u>Physocarpus opulifolius</u>	Rosaceae	<u>Polemonium x richardsonii</u>	Polemoniaceae
<u>Picea abies</u>	Pinaceae	<u>Populus tremula</u>	Salicaceae
<u>Picea engelmanni</u>	Pinaceae	<u>Potentilla fruticosa</u>	Rosaceae
<u>Picea glauca</u>	Pinaceae	<u>Potentilla recta</u>	Rosaceae
<u>Picea pungens</u>	Pinaceae	<u>Prunus americana</u>	Rosaceae
<u>Pinckneya pubens</u>	Rubiaceae	<u>Prunus padus</u>	Rosaceae
<u>Pinus banksiana</u>	Pinaceae	<u>Prunus pensylvanica</u>	Rosaceae
<u>Pinus contorta</u>	Pinaceae	<u>Prunus serotina</u>	Rosaceae
<u>Pinus densiflora</u>	Pinaceae	<u>Prunus tomentosa</u>	Rosaceae
<u>Pinus echinata</u>	Pinaceae	<u>Prunus virginiana</u>	Rosaceae
<u>Pinus excelsa</u>	Pinaceae	<u>Psoralea bituminosa</u>	Fabaceae
<u>Pinus flexilis</u>	Pinaceae	<u>Puccinellia distans</u>	Poaceae
<u>Pinus hwangshanensis</u>	Pinaceae	<u>Puccinellia maritima</u>	Poaceae
<u>Pinus koraensis</u>	Pinaceae	<u>Purshia tridentata</u>	Rosaceae
<u>Pinus massoniana</u>	Pinaceae	<u>Ranunculus acris</u>	Ranunculaceae
<u>Pinus mugo</u>	Pinaceae	<u>Ranunculus lappaceus</u>	Ranunculaceae
<u>Pinus nigra</u>	Pinaceae	<u>Ranunculus orthorhynchus</u>	Ranunculaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Ranunculus pensylvanicus</u>	Ranunculaceae	<u>Rubus strigosus</u>	Rosaceae
<u>Ranunculus platinifolius</u>	Ranunculaceae	<u>Rudbeckia hirta</u>	Asteraceae
<u>Ranunculus repens</u>	Ranunculaceae	<u>Rudbeckia purpurea</u>	Asteraceae
<u>Ranunculus sceleratus</u>	Ranunculaceae	<u>Rumex venosus</u>	Polygonaceae
<u>Ratibida columnifera</u>	Asteraceae	<u>Salix alba</u>	Salicaceae
<u>Rhamnus frangula</u>	Rhamnaceae	<u>Salix arctica</u>	Salicaceae
<u>Rhamnus purshiana</u>	Rhamnaceae	<u>Salvia argentea</u>	Lamiaceae
<u>Rhus copallina</u>	Anacardiaceae	<u>Salvia cleistogama</u>	Lamiaceae
<u>Rhus glabra</u>	Anacardiaceae	<u>Salvia horminum</u>	Lamiaceae
<u>Rhus trilobata</u>	Anacardiaceae	<u>Salvia jurisicii</u>	Lamiaceae
<u>Rhus typhina</u>	Anacardiaceae	<u>Salvia sclarea</u>	Lamiaceae
<u>Ribes aureum</u>	Grossulariaceae	<u>Salvia splendens</u>	Lamiaceae
<u>Ribes cereum</u>	Grossulariaceae	<u>Salvia verbenacea</u>	Lamiaceae
<u>Rosa acicularis</u>	Rosaceae	<u>Salvia verticillata</u>	Lamiaceae
<u>Rosa agrestis</u>	Rosaceae	<u>Salvia viridis</u>	Lamiaceae
<u>Rosa arkansana</u>	Rosaceae	<u>Sambucus canadensis</u>	Caprifoliaceae
<u>Rosa canina</u>	Rosaceae	<u>Sambucus glauca</u>	Caprifoliaceae
<u>Rosa corymbifera</u>	Rosaceae	<u>Sambucus nigra</u>	Caprifoliaceae
<u>Rosa ecae</u>	Rosaceae	<u>Sambucus pubens</u>	Caprifoliaceae
<u>Rosa eglanteria</u>	Rosaceae	<u>Sambucus racemosa</u>	Caprifoliaceae
<u>Rosa gymnocarpa</u>	Rosaceae	<u>Sanguisorba canadensis</u>	Rosaceae
<u>Rosa majalis</u>	Rosaceae	<u>Sanguisorba officinalis</u>	Rosaceae
<u>Rosa micrantha</u>	Rosaceae	<u>Saponaria officinalis</u>	Rosaceae
<u>Rosa nitidula</u>	Rosaceae	<u>Saxifraga pectinata</u>	Saxifragaceae
<u>Rosa pimpinellifolia</u>	Rosaceae	<u>Scirpus atrovirens</u>	Cyperaceae
<u>Rosa rubrifolia</u>	Rosaceae	<u>Scirpus cyperinus</u>	Cyperaceae
<u>Rosa rugosa</u>	Rosaceae	<u>Scirpus lacustris</u>	Cyperaceae
<u>Rosa sempervirens</u>	Rosaceae	<u>Scirpus maritimus</u>	Cyperaceae
<u>Rosa sicularis</u>	Rosaceae	<u>Scirpus sylvaticus</u>	Cyperaceae
<u>Rosa spinosissima</u>	Rosaceae	<u>Scirpus tabernaemontani</u>	Cyperaceae
<u>Rosa villosa</u>	Rosaceae	<u>Sedum acre</u>	Crassulaceae
<u>Rosa woodsii</u>	Rosaceae	<u>Sedum hybridum</u>	Crassulaceae
<u>Rubus idaeus</u>	Rosaceae	<u>Sedum kamtschaticum</u>	Crassulaceae

<u>Name</u>	<u>Family</u>	<u>Name</u>	<u>Family</u>
<u>Sedum middendorffianum</u>	Crassulaceae	<u>Tilia cordata</u>	Tiliaceae
<u>Sedum rupestre</u>	Crassulaceae	<u>Trifolium arvense</u>	Fabaceae
<u>Sedum selskianum</u>	Crassulaceae	<u>Trifolium aureum</u>	Fabaceae
<u>Sedum stenopetalum</u>	Crassulaceae	<u>Trifolium campestre</u>	Fabaceae
<u>Senecio canus</u>	Asteraceae	<u>Trifolium dubium</u>	Fabaceae
<u>Senecio integrifolius</u>	Asteraceae	<u>Trifolium hybridum</u>	Fabaceae
<u>Silene acaulis</u>	Caryophyllaceae	<u>Trifolium medium</u>	Fabaceae
<u>Silene armeria</u>	Caryophyllaceae	<u>Trifolium pratense</u>	Fabaceae
<u>Silene glauca</u>	Caryophyllaceae	<u>Trifolium repens</u>	Fabaceae
<u>Silene inaperta</u>	Caryophyllaceae	<u>Trifolium spumosum</u>	Fabaceae
<u>Silene maritima</u>	Caryophyllaceae	<u>Trifolium stellatum</u>	Fabaceae
<u>Silphium laciniatum</u>	Asteraceae	<u>Trifolium subterraneum</u>	Fabaceae
<u>Sorbaria sorbifolia</u>	Rosaceae	<u>Trifolium undulatum</u>	Fabaceae
<u>Sorbus scopulina</u>	Rosaceae	<u>Tsuga canadensis</u>	Pinaceae
<u>Sorbus sitchensis</u>	Rosaceae	<u>Tsuga mertinsiana</u>	Pinaceae
<u>Spiraea alba</u>	Rosaceae	<u>Ulmus americana</u>	Ulmaceae
<u>Spiraea betulifolia</u>	Rosaceae	<u>Vaccinium vitis-idaea</u>	Ericaceae
<u>Spiraea lucida</u>	Rosaceae	<u>Viburnum dentatum</u>	Caprifoliaceae
<u>Symphoricarpos albus</u>	Caprifoliaceae	<u>Viburnum edule</u>	Caprifoliaceae
<u>Symphoricarpos x</u> <u>chenaultii</u>	Caprifoliaceae	<u>Viburnum lantana</u>	Caprifoliaceae
<u>Symphoricarpos</u> <u>occidentalis</u>	Caprifoliaceae	<u>Viburnum opulus</u>	Caprifoliaceae
<u>Symphoricarpos orbiculatus</u>	Caprifoliaceae	<u>Viburnum prunifolium</u>	Caprifoliaceae
<u>Syringa amurensis</u>	Oleaceae	<u>Viburnum rhytidophyllum</u>	Caprifoliaceae
<u>Syringa sweginzowii</u>	Oleaceae	<u>Vicia disperma</u>	Fabaceae
<u>Syringa villosa</u>	Oleaceae	<u>Vicia sepium</u>	Fabaceae
<u>Syringa vulgaris</u>	Oleaceae	<u>Vicia unijuga</u>	Fabaceae
<u>Tagetes erecta</u>	Asteraceae		
<u>Tagetes patula</u>	Asteraceae		
<u>Tagetes tenuifolia</u>	Asteraceae		
<u>Tanacetum vulgare</u>	Asteraceae		
<u>Thuja occidentalis</u>	Cupressaceae		
<u>Thuja orientalis</u>	Cupressaceae		

Plant Materials Acquired from SEA Regional Plant Introduction Stations
for Field PMC's:

The National Plant Materials Center serves as coordinator for the acquisition of all accessions from regional plant introduction stations for use by field plant materials centers. These regional plant introduction stations of the Science and Education Administration are located at Geneva, New York; Ames, Iowa; Experiment, Georgia; and Pullman, Washington.

Following is a list of field PMC's and plant materials received from the regional plant introduction stations in 1979:

<u>Species</u>	<u>Number of Accessions</u>
Americus, Georgia, PMC	
<u>Paspalum cromyrorhizon</u>	2
<u>Paspalum distichum</u>	1
<u>Paspalum pauciciliatum</u>	2
Corvallis, Oregon, PMC	
<u>Deschampsia cespitosa</u>	14
<u>Deschampsia flexuosa</u>	2
<u>Deschampsia</u> sp.	1
<u>Elymus glaucus</u>	33
Lockeford, California, PMC	
<u>Agropyron caninum</u>	2
<u>Agropyron imbricatum</u>	1
<u>Agropyron intermedium</u>	1
<u>Agropyron intermedium</u> var. <u>trichophorum</u>	1
<u>Agropyron libanoticum</u>	4
<u>Agropyron tsukushiense</u>	1
<u>Agropyron varnense</u>	1
<u>Brachiaria nigropedata</u>	1
<u>Brachiaria xantholeuca</u>	1
<u>Kochia prostrata</u>	1

Plant Specimens Submitted for Reidentification

Another function of the NPMC is to maintain contacts for authoritative identification of plant specimens submitted by SCS personnel. The center staff also has the responsibility of observing new introductions for questions of identify. Questionable plants are collected, pressed and dried, and submitted to the Plant Taxonomy Laboratory of the Science and Education Administration for identification.

The following plants were grown at the NPMC or one of the field PMC's and submitted for identification in 1979:

<u>PI or Other Number</u>	<u>Original Name</u>	<u>Submitted By</u>	<u>Corrected Name</u>
263393	<u>Arachis</u> sp.	NPMC	<u>Arachis monticola</u> Krap. and Rig.
322325	<u>Cassia</u> sp.	NPMC	Awaiting determination
368881	<u>Dactylis</u> sp.	NPMC	<u>Dactylis glomerata</u> L.
207538	<u>Desmodium</u> sp.	NPMC	<u>Desmodium tortuosum</u> (Sw.) DC.
317895	<u>Desmodium</u> sp.	NPMC	<u>Desmodium tortuosum</u> (Sw.) DC.
364790	<u>Desmodium</u> sp.	NPMC	<u>Desmodium sandwicense</u> E. Meyer
361875	<u>Digitaria</u> sp.	NPMC	<u>Digitaria milanjiana</u> (Rendle) Stapf
314665	<u>Elymus junceus</u>	Bridger PMC	Awaiting determination
368882	<u>Eragrostis brownii</u>	NPMC	<u>Eragrostis curvula</u> (Schrad.) Nees
276033	<u>Eragrostis horizontalis</u>	NPMC	<u>E. lehmanniana</u> Nees XE. <u>trichophora</u> Coss. and Dur.
-	Grass	NPMC	<u>Brachypodium sylvaticum</u> (Huds.) Beauv.
368885	<u>Haynaldia</u> sp.	NPMC	<u>Haynaldia villosa</u> (L.) Schur
331392	<u>Hyparrhenia</u> sp.	NPMC	<u>Hyparrhenia anthistirioidea</u> (A. Rich.) Stapf
345998	<u>Hypericum</u> sp.	NPMC	Awaiting determination

<u>PI or Other Number</u>	<u>Original Name</u>	<u>Submitted By</u>	<u>Corrected Name</u>
197015	<u>Indigofera</u> <u>pseudotinctoria</u>	NPMC	<u>Indigofera tinctoria</u> L.
Mich-364	<u>Lathyrus sylvestris</u>	Rose Lake PMC	Awaiting determination
383684	<u>Lippia</u> sp.	NPMC	<u>Phyla nodiflora</u> (L.) Greene
BN-23230	<u>Lupinus</u> sp.	NPMC	Awaiting determination
383724	<u>Oryzopsis</u> sp.	Pullman PMC	<u>Oryzopsis</u> sp. aff. <u>virescens</u> (Trin.) Beck
410319	<u>Pentstemon setifolius</u>	NPMC	<u>Eragrostis heteromera</u> Stapf
383758	<u>Setaria</u> sp.	NPMC	<u>Setaria glauca</u> (L.) Beauv.
HA-4179	Unknown	Hawaii PMC	<u>Pennisetum longistylum</u> Hochst. ex A. Rich.
321417	<u>Zornia</u> sp.	NPMC	Awaiting determination

Literature Reviews

The NPMC maintains a file containing information on many genera. Also, requests for information retrieval are placed with the National Agricultural Library. Requests come from field plant materials centers, plant materials specialists, and state and federal agencies. Also, from research organizations and private individuals both in this country and abroad. Some of the major topics researched in 1979 were:

Alnus glutinosa - potential for use in reclamation of coal mine spoils

Andropogon gerardi - management and reproduction techniques; dormancy and germination requirements

Armeria maritima - tolerance to heavy metals

Arundo donax - propagation and management techniques

Dactylis glomerata - drought tolerant varieties; methods for determining drought tolerance in greenhouse and field plantings

Imperata cylindrica - geographical distribution in the United States; magnitude of problem as a weed; forage value; control methods; response to grazing, fertilization, etc.

Lolium temulentum - toxicity when used for forage

Paulownia tomentosa - potential for use in reclamation of coal mine spoils

Striga asiatica - control methods

Bobwhite quail: feeding habits; management of vegetation for quail habitat.

Revegetation of surface mine spoils contaminated with heavy metals.

Tropical agriculture - problems; tropical agricultural activities on slopes.

Use of vegetation for urban noise abatement, urban temperature modification.

Use of vegetation as indicators of air quality.

Seed Production - 1979

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-06625	<u>Achillea millefolium</u> L.	Denmark	15
T-06626	<u>Achillea millefolium</u> L.	Denmark	14
T-06627	<u>Achillea millefolium</u> L.	Denmark	2
T-06628	<u>Achillea millefolium</u> L.	Denmark	8
T-06629	<u>Achillea millefolium</u> L.	Greenland	trace
T-06631	<u>Achillea ptarmica</u> L.	Denmark	4
380613	<u>Achillea</u> sp.	Iran	trace
414420	<u>Antheophora pubescens</u> Nees	S. Africa	4
414425	<u>Antheophora pubescens</u> Nees	S. Africa	1
414427	<u>Antheophora pubescens</u> Nees	S. Africa	trace
414430	<u>Antheophora pubescens</u> Nees	S. Africa	3
414431	<u>Antheophora pubescens</u> Nees	S. Africa	1
414434	<u>Antheophora pubescens</u> Nees	S. Africa	trace
414438	<u>Antheophora pubescens</u> Nees	S. Africa	trace
414443	<u>Antheophora pubescens</u> Nees	S. Africa	trace
T-06665	<u>Armeria maritima</u> (Mill.) Willd.	Norway	trace
420339	<u>Armeria maritima</u> (Mill.) Willd.	Belgium	trace
420340	<u>Armeria maritima</u> (Mill.) Willd.	Belgium	trace
T-07124	<u>Armeria maritima</u> (Mill.) Willd. sibirica	Greenland	trace
T-06672	<u>Artemisia vulgaris</u> L.	Denmark	trace
202149	<u>Astragalus</u> sp.	Argentina	10

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-06680	<u>Atriplex hortensis</u> L.	Denmark	11
T-07126	<u>Atriplex hortensis</u> L. var. <u>rubra</u> L.	Denmark	60
T-07127	<u>Atriplex littoralis</u> L.	Norway	1
T-06682	<u>Atriplex patula</u> L. ssp. <u>patula</u>	Denmark	2
T-06683	<u>Atriplex patula</u> L. ssp. <u>patula</u>	Denmark	7
T-07129	<u>Atriplex sabulosa</u> Rouy	Norway	tran
368852	<u>Atriplex semibaccata</u> R. Br.	Australia	7
368853	<u>Atriplex semibaccata</u> R. Br.	Australia	5
365646	<u>Biserrula pelicinus</u>	Spain	110
415865	<u>Blackiella conduplicata</u> Aellen	S. Africa	28
380762	<u>Bromus erectus</u> Huds.	Iran	trace
380763	<u>Bromus tomentellus</u> Boiss.	Iran	trace
380775	<u>Bromus tomentellus</u> Boiss.	Iran	3
384828	<u>Bromus tomentellus</u> Boiss.	Iran	trace
345968	<u>Calamagrostis arundinacea</u> (L.) Roth	Norway	trace
T-06699	<u>Calendula officinalis</u> L.	Spain	19
T-06702	<u>Campanula rotundifolia</u> L.	Denmark	trace
T-06704	<u>Campanula rotundifolia</u> L.	Denmark	trace
T-06705	<u>Campanula rotundifolia</u> L.	Denmark	trace
T-06706	<u>Campanula rotundifolia</u> L.	Denmark	trace
T-06707	<u>Campanula rotundifolia</u> L.	Norway	trace
322325	<u>Cassia</u> sp.	Brazil	2
T-06720	<u>Centaurea cyanus</u> L.	Denmark	trace
T-06721	<u>Centaurea cyanus</u> L.	Denmark	trace

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-11322	<u>Centaurea cyanus</u> L.	Iran	trace
T-06724	<u>Chrysanthemum coronarium</u> L.	Denmark	3
T-06725	<u>Chrysanthemum coronarium</u> L.	Denmark	3
T-06726	<u>Chrysanthemum leucanthemum</u> L.	Denmark	trace
T-06727	<u>Chrysanthemum leucanthemum</u> L.	Denmark	1
T-06728	<u>Chrysanthemum leucanthemum</u> L.	Denmark	trace
T-06729	<u>Chrysanthemum segetum</u> L.	Denmark	1
T-06730	<u>Chrysanthemum segetum</u> L.	Denmark	5
T-06731	<u>Chrysanthemum segetum</u> L.	Denmark	15
T-07144	<u>Chrysopsis villosa</u> (Pursh.) Nutt.	Norway	trace
T-06733	<u>Cichorium intybus</u> L.	Denmark	4
310391	<u>Coronilla scordioides</u>	USSR	trace
T-06753	<u>Coronilla varia</u> L.	France	2
T-06754	<u>Corydalis sempervirens</u> (L.) Pers.	Denmark	7
T-06755	<u>Corydalis sempervirens</u> (L.) Pers.	Denmark	trace
409730	<u>Crotalaria</u> sp.	S. Africa	10
368881	<u>Dactylis glomerata</u> L.	Portugal	trace
346967	<u>Dactylis marina</u> Borrill	Wales	trace
346968	<u>Dactylis marina</u> Borrill	Portugal	2
346970	<u>Dactylis marina</u> Borrill	Portugal	trace
311122	<u>Desmodium intortum</u> (Mill.) Fawc. and Rendle	Honduras	trace
322505	<u>Desmodium</u> sp.	Brazil	18
406167	<u>Digitaria mombasana</u> C. E. Hubb.	Kenya	21

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
325315	<u>Elymus sibiricus</u> L.	USSR	15
369236	<u>Elymus sibiricus</u> L.	USSR	2
T-07158	<u>Epilobium adenocaulon</u> Havsskn.	Denmark	1
T-07159	<u>Epilogium hornmanii</u> Reichb.	Denmark	2
T-07160	<u>Epilobium palustre</u> L.	Denmark	8
T-07161	<u>Epilobium palustre</u> L.	Denmark	2
T-07162	<u>Epilobium palustre</u> L.	Denmark	7
409817	<u>Eragrostis bicolor</u> Nees	S. Africa	trace
T-13189	<u>Eragrostis lehmanniana</u> Nees	Arizona	trace
T-07164	<u>Erigeron compositus</u> Pursh.	Norway	trace
380849	<u>Festuca ovina</u> L.	Iran	5
T-06810	<u>Gaillardia pulchella</u> Foug	N. Carolina	4
T-07166	<u>Gilia achilleifolia</u> Benth.	Denmark	10
T-06811	<u>Gilia capitata</u> Slms.	Denmark	trace
163453	<u>Glycine soja</u> Sieb. and Zucc.	N. Carolina	34
317896	<u>Glycine wightii</u> (Grah. ex Wight and Arn.) Verdc.	Tanzania	12
368885	<u>Haynaldia villosa</u> (L.) Schur	Australia	5
413794	<u>Helictotrichon pubescens</u> (Huds.) Pilger.	France	2
345998	<u>Hypericum</u> sp.	Norway	13
T-06820	<u>Hypochoeris radicata</u> L.	Denmark	26
T-06821	<u>Hypochoeris radicata</u> L.	Denmark	30
T-06822	<u>Hypochoeris radicata</u> L.	Denmark	28
T-06823	<u>Hypochoeris radicata</u> L.	Denmark	25
T-06855	<u>Lathyrus sylvestris</u> L.	Norway	6

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
T-06856	<u>Lathyrus sylvestris</u> L.	Norway	trace
282688	<u>Lathyrus sylvestris</u> L.	Sweden	35
T-06927	<u>Lobelia</u> sp.	Sweden	trace
T-11323	<u>Lotus</u> sp.	Turkey	trace
283637	<u>Lupinus angustifolia</u> L.	Portugal	1
303052	<u>Lupinus luteus</u> L.	S. Africa	25
326277	<u>Lupinus luteus</u> L.	USSR	14
326278	<u>Lupinus luteus</u> L.	USSR	1
326279	<u>Lupinus luteus</u> L.	USSR	29
338648	<u>Lupinus luteus</u> L.	Morocco	23
368921	<u>Lupinus luteus</u> L.	Hungary	1
T-06970	<u>Lupinus nanus</u>	Denmark	1
T-06972	<u>Lupinus succulentus</u>	Denmark	18
T-06973	<u>Lupinus</u> sp.	New York	2
T-06974	<u>Lythrum salicaria</u> L.	Denmark	3
T-06975	<u>Lythrum salicaria</u> L.	Denmark	2
298624	<u>Macroptilium atropurpureum</u> (DC.) Urb.	China	77
300997	<u>Macroptilium atropurpureum</u> (DC.) Urb.	China	63
322575	<u>Macroptilium atropurpureum</u> (DC.) Urb.	Brazil	72
322576	<u>Macroptilium atropurpureum</u> (DC.) Urb.	Australia	81
322577	<u>Macroptilium atropurpureum</u> (DC.) Urb.	Australia	66
322578	<u>Macroptilium atropurpureum</u> (DC.) Urb.	Australia	66

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
322581	<u>Macroptilium atropurpureum</u> (DC.) Urb.	Australia	80
T-06978	<u>Malva moschata</u> L.	Belgium	44
T-06979	<u>Malva moschata</u> L.	Denmark	trace
T-06980	<u>Malva moschata</u> L.	Denmark	15
T-06981	<u>Malva moschata</u> L.	Denmark	75
236606	<u>Medicago falcata</u> L.	France	2
227452	<u>Medicago lupulina</u> L.	Iran	30
T-06997	<u>Medicago polymorpha</u> L.	France	5
T-06998	<u>Medicago polymorpha</u> L.	France	4
T-07025	<u>Melilotus alba</u> Medik.	France	6
322560	<u>Melilotus alba</u> Medik.	Brazil	28
383707	<u>Melilotus alba</u> Medik.	Turkey	10
325420	<u>Melilotus alba</u> var. <u>annua</u> Coe.	USSR	21
289314	<u>Melilotus officinalis</u> Lam.	Hungary	25
314465	<u>Melilotus officinalis</u> Lam.	USSR	4
325423	<u>Melilotus officinalis</u> Lam.	USSR	trace
325427	<u>Melilotus officinalis</u> Lam.	USSR	27
383708	<u>Melilotus officinalis</u> Lam.	Turkey	8
T-11324	<u>Melilotus officinalis</u> Lam.	Turkey	39
T-07027	<u>Mimulus guttatus</u>	Denmark	trace
T-07188	<u>Nemophila maculata</u>	Denmark	trace
T-07189	<u>Nemophila menziesii</u>	Denmark	2
T-07190	<u>Nemophila menziesii atomaria</u>	Denmark	2
T-07191	<u>Nemophila menziesii insignis</u>	Denmark	3
410226	<u>Panicum deustum</u> Thunb.	S. Africa	7

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
410251	<u>Panicum maximum</u> Jacq.	S. Africa	10
410252	<u>Panicum maximum</u> Jacq.	S. Africa	10
410254	<u>Panicum maximum</u> Jacq.	S. Africa	14
410255	<u>Panicum maximum</u> Jacq.	S. Africa	20
T-07031	<u>Papaver rhoeas</u> L.	Denmark	trace
T-07032	<u>Papaver rhoeas</u> L.	Denmark	2
T-07033	<u>Papaver rhoeas</u> L.	Denmark	4
339896	<u>Paspalum plicatulum</u> Michx.	Australia	trace
339897	<u>Paspalum plicatulum</u> Michx.	Australia	trace
T-07038	<u>Penstemon digitalis</u> Nutt.	Penna.	335
368991	<u>Piptochaetum</u> sp.	Australia	2
284251	<u>Poa alpina</u> L.	Czech.	trace
T-07198	<u>Poa kelloggii</u> Vasey	France	3
T-07054	<u>Poa nemoralis</u> L.	France	2
T-07056	<u>Potentilla recta</u> L.	Denmark	2
283966	<u>Psoralea bituminosa</u> L.	France	8
380900	<u>Salvia</u> cf. <u>verticillata</u> L.	Iran	5
312470	<u>Sanquisorba officinalis</u> L.	USSR	trace
T-07089	<u>Saponaria officinalis</u> L.	Denmark	1
T-07210	<u>Silene acaulis</u> (L.) Jacq.	Denmark	trace
T-07091	<u>Silene armeria</u> L.	Denmark	130
400309	<u>Stylosanthes fruticosa</u> (Retz.) Alst.	Rhodesia	32
372359	<u>Tagetes erecta</u> L.	USSR	54
350697	<u>Tagetes patula</u> L.	Netherlands	5
T-07099	<u>Tanacetum vulgare</u> L.	Norway	trace

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>	<u>Grams</u>
406170	<u>Teramnus labialls</u>	Kenya	64
410373	<u>Themeda triandra</u> Forsk.	S. Africa	trace
T-07101	<u>Trifolium aureum</u> Poll.	Denmark	trace
233286	<u>Trifolium purpureum</u> Loisel.	Israel	trace
238370	<u>Trifolium purpureum</u> Loisel.	Lebanon	trace
238371	<u>Trifolium purpureum</u> Loisel.	Cyprus	trace
292482	<u>Trifolium purpureum</u> Loisel.	Israel	trace
292483	<u>Trifolium purpureum</u> Loisel.	Israel	trace
T-07104	<u>Trifolium spumosum</u> L.	Denmark	150
T-07105	<u>Trifolium spumosum</u> L.	France	68
T-07106	<u>Trifolium subterraneum</u> L.	France	18
120210	<u>Trifolium</u> sp.	Turkey	61
369145	<u>Trifolium</u> sp.	Australia	17
369146	<u>Trifolium</u> sp.	Australia	trace
369147	<u>Trifolium</u> sp.	<u>Australia</u>	trace
369149	<u>Trifolium</u> sp.	Turkey	trace
413776	<u>Vicia amphicarpa</u> Dorthes	Australia	trace
317310	<u>Vicia vinussinia</u> Nakai	Korea	3
344755	<u>Vigna</u> sp.	Kenya	trace
321417	<u>Zornia</u> sp.	Brazil	trace

Distribution of Plant Materials

The primary function of the center is to request, assemble, and as needed, increase seed and vegetative material from foreign sources to meet requests of field plant materials centers according to priorities established in the long-range program of each PMC.

Most requests are filled from the NPMC seed inventory from seed that has been reproduced here.

Packet Seed Shipments to Field PMC' and Other SCS Units

<u>Species</u>	<u>No. of packets</u>	<u>Species</u>	<u>No. of packets</u>
Aberdeen, Idaho, PMC			
<u>Acer ginnala</u>	4	<u>Astragalus galegiformis</u>	1
<u>Acer glabrum</u>	1	<u>Astragalus hamosus</u>	1
<u>Acer glabrum</u> var. <u>douglassi</u>	1	<u>Astragalus neglectus</u>	1
<u>Acer tataricum</u>	3	<u>Astragalus penduliflorus</u>	1
<u>Acer tataricum</u> var. <u>torminaloides</u>	1	<u>Astragalus pentaglottis</u>	1
<u>Agropyron trachycaulum</u>	1	<u>Astragalus sesameus</u>	1
<u>Amelanchier alnifolia</u>	1	<u>Astragalus sinicus</u>	9
<u>Amelanchier canadensis</u>	1	<u>Astragalus trimestris</u>	1
<u>Amorpha fruticosa</u>	6	<u>Balsamorhiza hookeri</u>	1
<u>Artemesia abrotanum</u>	1	<u>Bromus erectus</u>	9
<u>Astragalus baeticus</u>	2	<u>Bromus tomentellus</u>	4
<u>Astragalus calycinus</u>	1	<u>Bromus tomentosus</u>	1
<u>Astragalus centralpinus</u>	1	<u>Calamagrostis canescens</u>	2
<u>Astragalus cicer</u>	3	<u>Calamagrostis epigeios</u>	2
<u>Astragalus contoruplicatus</u>	1	<u>Caragana arborescens</u>	5
<u>Astragalus cymbicarpos</u>	1	<u>Caragana boisi</u>	1

Aberdeen, Idaho, PMC (cont'd.)

<u>Caragana decorticans</u>	1	<u>Daphne mezereum</u>	6
<u>Caragana frutex</u>	1	<u>Deschampsia caespitosa</u>	5
<u>Caragana microphylla</u>	1	<u>Deschampsia caespitosa</u> var. <u>pollida</u>	1
<u>Ceanothus fendleri</u>	1	<u>Elymus giganteus</u>	1
<u>Ceanothus sanguineus</u>	1	<u>Elymus sibiricus</u>	3
<u>Ceanothus velutinus</u>	1	<u>Enkianthus campanulatus</u>	1
<u>Cornus alba</u>	1	<u>Euonymus alatus</u>	1
<u>Cornus alternifolia</u>	2	<u>Frangula alnus</u>	12
<u>Cornus sanguinea</u>	5	<u>Hedysarum coronarium</u>	3
<u>Coronilla emerus</u>	3	<u>Hedysarum flexuosum</u>	1
<u>Coronilla emerus</u> ssp. <u>emerus</u>	1	<u>Hedysarum multijugum</u>	2
<u>Coronilla glauca</u>	1	<u>Hippophae rhamnoides</u>	2
<u>Coronilla minima</u> var. <u>australis</u>	1	<u>Holodiscus discolor</u>	2
<u>Coronilla scorpioides</u>	5	<u>Holodiscus dumosus</u>	1
<u>Coronilla valentina</u>	1	<u>Iris missouriensis</u>	1
<u>Coronilla varia</u>	9	<u>Iris setosa</u>	1
<u>Cotoneaster adpressus</u>	2	<u>Juniperus chinensis</u>	1
<u>Cotoneaster apiculatus</u>	1	<u>Juniperus communis</u>	3
<u>Crataegus chlorosarca</u>	1	<u>Juniperus communis</u> ssp. <u>communis</u>	1
<u>Crataegus douglasii</u>	1	<u>Juniperus osteosperma</u>	1
<u>Crataegus intricata</u>	2	<u>Juniperus scopularum</u>	1
<u>Dactylis glomerata</u> ssp. <u>woronowii</u>	1	<u>Lathyrus cicera</u>	5
<u>Dactylis</u> sp.	1	<u>Ligustrum</u> sp.	2

Aberdeen, Idaho, PMC (cont'd.)

<u>Lonicera chrysantha</u>	1	<u>Physocarpus amurensis</u>	1
<u>Lonicera involucrata</u>	1	<u>Physocarpus monogynus</u>	2
<u>Lonicera maackii</u>	2	<u>Physocarpus opulifolius</u>	3
<u>Lonicera tatarica</u>	3	<u>Prunus serotina</u>	2
<u>Lupinus luteus</u>	6	<u>Prunus tomentosa</u>	1
<u>Lycium chinense</u>	2	<u>Prunus virginiana</u>	1
<u>Lycium chinense</u> var. <u>ovatum</u>	1	<u>Prunus virginiana</u> var. <u>melanocarpa</u>	1
<u>Malus sylvestris</u>	2	<u>Rhamnus frangula</u>	1
<u>Malus transitoria</u>	1	<u>Rhamnus purshiana</u>	2
<u>Malus</u> sp.	1	<u>Rhus aromatica</u>	1
<u>Mimulus guttatus</u>	3	<u>Rhus copallina</u>	3
<u>Mimulus guttatus</u> ssp. <u>guttatus</u>	1	<u>Rhus glabra</u>	5
<u>Penstemon cordifolius</u>	1	<u>Rhus trilobata</u>	1
<u>Penstemon digitalis</u>	2	<u>Rhus typhina</u>	2
<u>Penstemon grandiflorus</u>	1	<u>Rhus rugosa</u>	1
<u>Penstemon palmeri</u>	1	<u>Ribes aureum</u>	1
<u>Penstemon richardsonii</u>	1	<u>Ribes cereum</u>	1
<u>Penstemon richardsonii</u> var. <u>richardsonii</u>	1	<u>Rosa canina</u>	5
<u>Penstemon strictus</u>	1	<u>Rosa rugosa</u>	1
<u>Philadelphus coronarius</u>	1	<u>Rosa wichuriana</u>	1
<u>Philadelphus lewisii</u>	3	<u>Rosa woodsii</u> var. <u>ultramontana</u>	1
<u>Philadelphus tenuifolius</u>	1	<u>Sambucus canadensis</u>	2
<u>Photinia villosa</u>	2	<u>Sambucus glauca</u>	1

<u>Sambucus niger</u>	1	<u>Trifolium canescens</u>	1
<u>Sambucus nigra</u>	2	<u>Trifolium chilense</u>	1
<u>Sambucus pubens</u>	4	<u>Trifolium fragiferum</u>	6
<u>Sambucus racemosa</u>	3	<u>Trifolium hybridum</u>	5
<u>Sambucus racemose</u> ssp. <u>pubens</u> var. <u>melanocarpa</u>	1	<u>Trifolium lupinaster</u>	1
<u>Sorbaria sorbifolia</u>	3	<u>Trifolium medium</u>	1
<u>Sorbaria sorbifolia</u> var. <u>stellipila</u>	1	<u>Trifolium occidentale</u>	3
<u>Spiraea alba</u>	2	<u>Trifolium pannonicum</u>	3
<u>Spiraea betulifolia</u> ssp. <u>lucida</u>	1	<u>Trifolium tridentatum</u>	1
<u>Spiraea lucida</u>	1	<u>Trifolium willdenovii</u>	2
<u>Sporobolus airoides</u>	7	<u>Viburnum dentatum</u>	3
<u>Sporobolus cryptandrus</u>	2	<u>Viburnum lantana</u>	2
<u>Symphoricarpos occidentalis</u>	1	<u>Viburnum opulus</u>	4
<u>Symphoricarpos orbiculatus</u>	1	<u>Viburnum prunifolium</u>	2
<u>Symphoricarpos X chenaultii</u>	1	<u>Viburnum rhytidophyllum</u>	1
<u>Syringa amurensis</u>	1	<u>Vicia amurensis</u>	3
<u>Syringa sweginzowii</u>	1	<u>Vicia cornigera</u>	1
<u>Syringa villosa</u>	1	<u>Vicia cracca</u>	5
<u>Tilia cordata</u>	2	<u>Vicia fulgens</u>	1
<u>Trifolium alpestre</u>	2	<u>Vicia globosa</u>	1
<u>Trifolium ambiguum</u>	3	<u>Vicia hajastana</u>	1
<u>Trifolium bejariense</u>	1	<u>Vicia hyrcanica</u>	1
<u>Trifolium billardieri</u>	1	<u>Vicia macrocarpa</u>	1
		<u>Vicia michauxii</u>	2

Aberdeen, Idaho, PMC (cont'd.)

<u>Vicia neglecta</u>	1	<u>Armeria alliacea</u>	1
<u>Vicia pisiformis</u>	5	<u>Armeria canescens</u> ssp. <u>nebrodensis</u>	1
<u>Vicia sepium</u>	8	<u>Armeria cinerea</u>	1
<u>Vicia sylvatica</u>	1	<u>Armeria maritima</u>	11
<u>Vicia tenuifolia</u>	2	<u>Armeria pseudoarmeria</u>	3
<u>Vicia unijuga</u>	1	<u>Armeria rumelica</u>	1
Americus, Georgia, PMC		<u>Aster novae-angliae</u>	1
<u>Coronilla varia</u>	1	<u>Carex crinita</u>	1
<u>Caesalpinia clementis</u>	1	<u>Carex divulsa</u>	2
<u>Caesalpinia sappan</u>	1	<u>Carex filiformis</u>	1
<u>Caesalpinia violacea</u>	1	<u>Carex flacca</u>	3
<u>Paspalum alcalinum</u>	1	<u>Carex lepidocarpa</u>	1
<u>Paspalum cromyrorhizon</u>	4	<u>Carex limosa</u>	1
<u>Paspalum distichum</u>	1	<u>Carex nigra</u>	1
<u>Paspalum intermedium</u>	1	<u>Carex otrubae</u>	2
<u>Paspalum pauciliatum</u>	2	<u>Carex panicea</u>	1
<u>Paspalum plicatulum</u>		<u>Carex paupercula</u>	1
Big Flats, New York, PMC		<u>Carex pendula</u>	3
<u>Agrostis alba</u>	3	<u>Carex polyphylla</u>	1
<u>Agrostis gigantea</u>	2	<u>Carex pseudocyperus</u>	2
<u>Agrostis stolonifera</u>	2	<u>Carex pulicaris</u>	1
<u>Agrostis vulgaris</u>	2	<u>Carex remota</u>	1
<u>Alnus serrulata</u>	1	<u>Carex retrosa</u>	1

Big Flats, New York, PMC (cont'd.)

<u>Carex scaposa</u>	1	<u>Bouteloua gracilis</u>	1
<u>Carex spicata</u>	1	<u>Elymus cinereus</u>	3
<u>Carex vulpinoidea</u>	1	<u>Erigeron acre</u>	3
<u>Cornus alba</u>	2	<u>Erigeron borealis</u>	2
<u>Cornus stolonifera</u>	2	<u>Erigeron humilis</u>	1
<u>Lathyrus latifolius</u>	1	<u>Koeleria cristata</u>	1
<u>Lathyrus sylvestris</u>	1	<u>Liatris punctata</u>	1
<u>Malva moschata</u>	3	<u>Oryzopsis hymenoides</u>	7
<u>Poa compressa</u>	2	<u>Penstemon digitalis</u>	2
<u>Rudbeckia hirta</u>	2	<u>Poa compressa</u>	2
<u>Saponaria officinalis</u>	16	<u>Sporobolus asper</u> var. <u>hookeri</u>	2
<u>Scirpus atrovirens</u>	1	<u>Sporobolus cryptandrus</u>	2
<u>Scirpus cyperinus</u>	1	<u>Vicia amurensis</u>	1
<u>Scirpus ligustris</u>	1	<u>Vicia baicalensis</u>	1
<u>Scirpus maritimus</u>	8	<u>Vicia cassubica</u>	1
<u>Scirpus silvaticus</u>	1	<u>Vicia cornigera</u>	1
<u>Scirpus tabernaemontani</u>	3	<u>Vicia cracca</u>	15
Bridger, Montana, PMC		<u>Vicia dumetorum</u>	2
<u>Achillea millefolium</u>	5	<u>Vicia fulgens</u>	1
<u>Achillea ptarmica</u>	3	<u>Vicia globosa</u>	1
<u>Agropyron dasystachyum</u>	1	<u>Vicia graminea</u>	1
<u>Agropyron spicatum</u>	1	<u>Vicia hajastana</u>	1
<u>Amorpha canescens</u>	1	<u>Vicia hyrcanica</u>	1
<u>Artemesia vulgaris</u>	4	<u>Vicia michauxii</u>	2

Bridger, Montana, PMC (cont'd.)

<u>Vicia neglecta</u>	1
<u>Vicia noeana</u>	2
<u>Vicia pilosa</u>	1
<u>Vicia pisiformis</u>	2
<u>Vicia sylvatica</u>	3
<u>Vicia tenuifolia</u>	3
<u>Vicia tenuifolia</u> var. <u>dalmatica</u>	1
<u>Vicia unijuga</u>	1
<u>Vicia variegata</u>	1
<u>Vicia</u> sp.	1

Cape May, New Jersey, PMC

<u>Ammophila arenaria</u>	7
<u>Ammophila</u> X <u>baltica</u>	1
<u>Elymus giganteus</u>	1
<u>Juniperus virginiana</u>	1
<u>Medicago lupulina</u>	1
<u>Rosa rugosa</u>	1

Corvallis, Oregon, PMC

<u>Agropyron intermedium</u>	2
<u>Agropyron trichophorum</u>	1

Rose Lake, Michigan, PMC

<u>Anthoxanthum odoratum</u>	1
<u>Rudbeckia hirta</u>	2

Hoolehua, Hawaii, PMC

<u>Ammophila breviligulata</u>	1
<u>Brachiaria brizantha</u>	1
<u>Brachiaria nigropedata</u>	1
<u>Brachiaria xantholeuca</u>	1
<u>Dolichos uniflorus</u> var. <u>uniflorus</u>	1
<u>Lotus corniculatus</u> var. <u>arvensis</u>	1
<u>Lotus pedunculatus</u>	2
<u>Lotus pedunculatus</u> var. <u>villosus</u>	1
<u>Medicago polymorpha</u>	4
<u>Medicago polymorpha</u> var. <u>brevispina</u>	15
<u>Medicago polymorpha</u> var. <u>polygyra</u>	2
<u>Medicago polymorpha</u> var. <u>vulgaris</u>	47
<u>Medicago polymorpha</u> var. <u>vulgaris</u> f. <u>tuberculata</u>	2
<u>Phaseolus atropurpureus</u>	4
<u>Vicia unijuga</u>	1

Knox City, Texas, PMC

<u>Acacia confusa</u>	1
<u>Acacia cyanophylla</u>	1
<u>Acacia cyclops</u>	1
<u>Acacia detinens</u>	1
<u>Adesmia muricata</u>	1

Knox City, Texas, PMC (cont'd.)

<u>Adesmia tenella</u>	1	<u>Ceratonia siliqua</u>	1
<u>Aeshynomene americana</u>	1	<u>Clitoria rubiginosa</u>	1
<u>Alysicarpus rugosus</u>	1	<u>Clitoria ternatea</u>	3
<u>Alysicarpus vaginalis</u>	1	<u>Dalea oaxacana</u>	1
<u>Antheophora pubescens</u>	31	<u>Desmodium barbatum</u>	1
<u>Anthyllis tetraphylla</u>	1	<u>Desmodium canum</u>	1
<u>Arachis sp.</u>	1	<u>Desmodium cinerascens</u>	1
<u>Argyrolobium uniflorum</u>	1	<u>Desmodium discolor</u>	1
<u>Astragalus boeticus</u>	1	<u>Desmodium distortum</u>	1
<u>Astragalus galegiformis</u>	1	<u>Desmodium intortum</u>	1
<u>Astragalus siliquosus</u>	1	<u>Desmodium nicaraguense</u>	1
<u>Astragalus sinicus</u>	1	<u>Desmodium perplexum</u>	1
<u>Biserrula pelecinus</u>	3	<u>Desmodium polycarpum</u>	1
<u>Cajanus cajan</u>	1	<u>Desmodium purpureum</u>	2
<u>Calopogonium mucunoides</u>	1	<u>Desmodium rigidum</u>	1
<u>Canavalia ensiformis</u>	1	<u>Desmodium sandwicense</u>	1
<u>Cassia abbreviata</u>	1	<u>Desmodium tortuosum</u>	1
<u>Cassia artemisoides</u>	1	<u>Desmodium uncinatum</u>	1
<u>Cassia bonariensis</u>	1	<u>Desmodium sp.</u>	2
<u>Cassia laevigata</u>	1	<u>Dolichos axillaris</u>	1
<u>Cassia mimosoides</u>	1	<u>Dolichos biflorus</u>	1
<u>Cassia pleurocarpa</u>	1	<u>Dolichos lablab</u>	1
<u>Centrosema pubescens</u>	1	<u>Dorycnium herbaceum</u>	1
<u>Centrosema virginianum</u>	1	<u>Dorycnium rectum</u>	1

Knox City, Texas, PMC (cont'd.)

<u>Galega officinalis</u>	1	<u>Lathyrus cicera</u>	1
<u>Glycine koidzumii</u>	1	<u>Lathyrus clymenum</u>	1
<u>Glycine ussuriensis</u>	1	<u>Lathyrus nissolia</u>	1
<u>Hedysarum coronarium</u>	1	<u>Lathyrus ochrus</u>	1
<u>Hippocrepis commutata</u>	1	<u>Lathyrus sativus</u>	5
<u>Hippocrepis comosa</u>	1	<u>Lotus edulis</u>	2
<u>Hippocrepis glauca</u>	1	<u>Lotus maroccanus</u>	1
<u>Hippocrepis multisiliquosa</u>	1	<u>Lotus mearnsii</u>	1
<u>Hippocrepis salamannii</u>	1	<u>Lotus palustris</u>	1
<u>Hippocrepis scabra</u>	1	<u>Lotus peregrinus</u>	1
<u>Hippocrepis unisiliquosa</u>	1	<u>Lupinus albus</u>	1
<u>Hosackia subpinnata</u>	1	<u>Lupinus elegans</u>	1
<u>Hymenocarpus circinnatus</u>	1	<u>Lupinus hirsutus</u>	1
<u>Indigofera circinella</u>	1	<u>Lupinus luteus</u>	1
<u>Indigofera colutea</u>	1	<u>Lupinus pilosus</u>	1
<u>Indigofera confusa</u>	1	<u>Medicago arabica</u>	1
<u>Indigofera echinata</u>	1	<u>Medicago aschersoniana</u>	1
<u>Indigofera glandulosa</u>	1	<u>Medicago ciliaris</u>	1
<u>Indigofera hirsuta</u>	2	<u>Medicago littoralis</u>	1
<u>Indigofera parodiana</u>	1	<u>Medicago murex</u>	1
<u>Indigofera pilosa</u>	1	<u>Medicago orbicularis</u>	3
<u>Indigofera suffruticosa</u>	1	<u>Medicago polymorpha</u> var. <u>vulgaris</u>	1
<u>Indigofera sumatrana</u>	1	<u>Medicago rotata</u>	1
<u>Lathyrus aphaca</u>	1		

Knox City, Texas, PMC (cont'd.)

<u>Medicago scutellata</u>	2	<u>Sesbania sesban</u>	2
<u>Medicago tribuloides</u>	1	<u>Stizolobium aterrimum</u>	1
<u>Medicago truncatula</u> var. <u>longispina</u>	1	<u>Stylosanthes fruticosa</u>	1
<u>Medicago tuberculata</u>	1	<u>Stylosanthes gracilis</u>	1
<u>Medicago turbinata</u>	1	<u>Stylosanthes humilis</u>	1
<u>Pennisetum setaceum</u>	9	<u>Sutherlandia frutescens</u>	1
<u>Onobrychis gaubae</u>	1	<u>Sutherlandia microphylla</u>	1
<u>Onobrychis melanotricha</u>	1	<u>Tephrosia virginiana</u>	1
<u>Onobrychis persica</u>	1	<u>Teramnus labialis</u>	1
<u>Onobrychis viciifolia</u>	1	<u>Trifolium alexandrinum</u>	2
<u>Ononis alopecuroides</u>	2	<u>Trifolium balansae</u>	1
<u>Ononis ornithopodioides</u>	1	<u>Trifolium cherleri</u>	2
<u>Ononis pubescens</u>	1	<u>Trifolium clypeatum</u>	1
<u>Ononis sicala</u>	1	<u>Trifolium curvisepalum</u>	1
<u>Ornithopus compressus</u>	1	<u>Trifolium dasyrum</u>	1
<u>Ornithopus isthmocarpus</u>	1	<u>Trifolium echinatum</u> var. <u>carmeli</u>	1
<u>Ornithopus sativus</u>	2	<u>Trifolium fragiferum</u>	3
<u>Phaseolus atropurpureus</u>	1	<u>Trifolium globosum</u>	1
<u>Phaseolus bracteatus</u>	1	<u>Trifolium glomeratum</u>	1
<u>Phaseolus lathyroides</u>	1	<u>Trifolium hirtum</u>	1
<u>Phaseolus lunatus</u>	1	<u>Trifolium incarnatum</u>	1
<u>Psoralea cinerea</u>	1	<u>Trifolium israeliticum</u>	1
<u>Scorpiurus muricata</u>	1	<u>Trifolium lappaceum</u>	1
<u>Sesbania punicea</u>	1	<u>Trifolium meduseum</u>	1

Knox City, Texas, PMC (cont'd)		Lockeford, California, PMC.	
<u>Trifolium palaestinum</u>	1	<u>Acacia albida</u>	2
<u>Trifolium pallidum</u>	1	<u>Acacia aneura</u>	2
<u>Trifolium pilulare</u>	2	<u>Acacia araneosa</u>	1
<u>Trifolium purpureum</u>	1	<u>Acacia armata</u>	1
<u>Trifolium resupinatum</u>	3	<u>Acacia calamifolia</u>	2
<u>Trifolium spumosum</u>	1	<u>Acacia confusa</u>	1
<u>Trifolium squarrosum</u>	1	<u>Acacia constricta</u>	1
<u>Trifolium stellatum</u>	1	<u>Acacia continua</u>	1
<u>Trifolium subterraneum</u>	1	<u>Acacia cupularis</u>	1
<u>Trifolium tomentosum</u>	1	<u>Acacia cyclophylla</u>	1
<u>Trigonella arabica</u>	1	<u>Acacia cyclops</u>	3
<u>Vicia angustifolia</u>	1	<u>Acacia detinens</u>	1
<u>Vicia articulata</u>	1	<u>Acacia extensa</u>	1
<u>Vicia benghalensis</u>	1	<u>Acacia farnesiana</u>	1
<u>Vicia filicaulis</u>	1	<u>Acacia gladiiformis</u>	1
<u>Vicia hybrida</u>	1	<u>Acacia graffiana</u>	1
<u>Vicia narbonensis</u>	1	<u>Acacia greggii</u>	1
<u>Vicia obscura</u>	1	<u>Acacia hirta</u>	1
<u>Vicia peregrina</u>	1	<u>Acacia horrida</u>	1
<u>Vicia sativa</u>	4	<u>Acacia imbricata</u>	1
<u>Vicia villosa</u>	1	<u>Acacia jonesii</u>	1
<u>Vigna decipiens</u>	1	<u>Acacia nilotica</u>	1
<u>Vigna luteola</u>	1	<u>Acacia notabilis</u>	1
<u>Vigna vexillata</u>	1	<u>Acacia penninervis</u>	1

<u>Acacia senegal</u>	1	<u>Brachiaria decumbens</u>	2
<u>Acacia stricta</u>	1	<u>Brachiaria nigropedata</u>	1
<u>Acacia trineura</u>	1	<u>Brachiaria xantholeuca</u>	2
<u>Acacia visco</u>	1	<u>Briza media</u>	6
<u>Acacia sp.</u>	1	<u>Briza stricta</u>	1
<u>Agropyron albicans</u> var. <u>griffithsii</u>	1	<u>Briza triloba</u>	1
<u>Agropyron ciliare</u>	1	<u>Coreopsis grandiflora</u>	1
<u>Agropyron cordifolia</u>	1	<u>Cupressus benthamii</u>	1
<u>Agropyron dasystachyum</u>	2	<u>Dactylis aschersoniana</u>	3
<u>Agropyron intermedium</u>	4	<u>Dactylis glomerata</u> var. <u>himalayensis</u>	1
<u>Agropyron lindleyi</u>	1	<u>Dactylis glomerata</u> ssp. <u>santai</u>	1
<u>Agropyron pectiniforme</u>	9	<u>Dactylis glomerata</u> ssp. <u>woronowii</u>	1
<u>Agropyron pungens</u>	1	<u>Dactylis marina</u>	1
<u>Agropyron smithii</u>	1	<u>Dorycnium herbaceum</u>	1
<u>Agropyron trichophorum</u>	1	<u>Elymus cf. agropyroides</u>	1
<u>Atriplex canescens</u> var. <u>linearis</u>	1	<u>Elymus akmolinensis</u>	1
<u>Atriplex halimus</u>	1	<u>Elymus angustus</u>	2
<u>Atriplex leucoclada</u>	1	<u>Elymus dahuricus</u>	1
<u>Atriplex littoralis</u>	3	<u>Elymus riparius</u>	1
<u>Atriplex spongiosa</u>	1	<u>Elymus triticoides</u>	1
<u>Atriplex suberecta</u>	1	<u>Elymus villosus</u>	1
<u>Atriplex vesicaria</u>	1	<u>Elymus virginicus</u>	2
<u>Brachiaria brizantha</u>	2		

Lockeford, California, PMC (cont'd.)

<u>Eucalyptus</u> <u>alba</u>	1	<u>Eucalyptus</u> <u>obliqua</u>	1
<u>Eucalyptus</u> <u>anceps</u>	1	<u>Eucalyptus</u> <u>oleosa</u> var. <u>oleosa</u>	1
<u>Eucalyptus</u> <u>angulosa</u>	1	<u>Eucalyptus</u> <u>oxymitra</u>	2
<u>Eucalyptus</u> <u>calycogona</u>	1	<u>Eucalyptus</u> <u>pileata</u>	1
<u>Eucalyptus</u> <u>campaspe</u>	1	<u>Eucalyptus</u> <u>pimpiniana</u>	1
<u>Eucalyptus</u> <u>cloeziana</u>	1	<u>Eucalyptus</u> <u>platypus</u>	1
<u>Eucalyptus</u> <u>conglobata</u> ssp. <u>fraseri</u>	1	<u>Eucalyptus</u> <u>platypus</u> var. <u>heterophylla</u>	1
<u>Eucalyptus</u> <u>diversifolia</u>	2	<u>Eucalyptus</u> <u>porosa</u>	2
<u>Eucalyptus</u> <u>dumosa</u>	1	<u>Eucalyptus</u> <u>sessilis</u>	1
<u>Eucalyptus</u> <u>ewartiana</u>	1	<u>Eucalyptus</u> <u>socialis</u>	1
<u>Eucalyptus</u> <u>foecunda</u>	1	<u>Eucalyptus</u> <u>striaticalyx</u>	1
<u>Eucalyptus</u> <u>gillii</u>	1	<u>Eucalyptus</u> <u>tetragona</u>	1
<u>Eucalyptus</u> <u>gongylocarpa</u>	1	<u>Eucalyptus</u> <u>viridis</u>	1
<u>Eucalyptus</u> <u>goniantha</u>	1	<u>Eucalyptus</u> <u>wandoo</u>	1
<u>Eucalyptus</u> <u>goniocalyx</u>	2	<u>Eucalyptus</u> sp.	1
<u>Eucalyptus</u> <u>gracilis</u>	1	<u>Festuca</u> <u>arundinacea</u>	1
<u>Eucalyptus</u> <u>incrassata</u>	2	<u>Festuca</u> <u>ovina</u>	2
<u>Eucalyptus</u> <u>landsdowneana</u> ssp. <u>albopurpurea</u>	1	<u>Festuca</u> <u>pratensis</u>	1
<u>Eucalyptus</u> <u>leucoxylon</u> var. <u>macrocarpa</u>	1	<u>Helanthus</u> <u>grosseserratus</u>	1
<u>Eucalyptus</u> <u>longicornis</u>	1	<u>Juniperus</u> <u>communis</u>	1
<u>Eucalyptus</u> X <u>mcintyrensis</u>	1	<u>Juniperus</u> <u>lacuyana</u>	1
<u>Eucalyptus</u> <u>megacornuta</u>	1	<u>Juniperus</u> <u>oxycedrus</u> ssp. <u>oxycedrus</u>	1
<u>Eucalyptus</u> <u>morrisii</u>	1	<u>Juniperus</u> <u>phoenicia</u>	7

Lockeford, California, PMC (cont'd.)

<u>Juniperus wallichiana</u>	1	<u>Celtis australis</u>	2
<u>Kochia prostrata</u>	1	<u>Celtis occidentalis</u>	2
<u>Liatris pycnostachya</u>	1	<u>Celtis reticulata</u>	1
<u>Paspalum dilatatum</u>	2	<u>Celtis sinensis</u>	1
<u>Paspalum urvillea</u>	1	<u>Cotoneaster acutifolius</u>	1
<u>Pinus echinata</u>	1	<u>Cotoneaster affinis</u> var. <u>baccillaris</u>	1
<u>Pinus excelsa</u>	1	<u>Cotoneaster ambiguus</u>	1
<u>Pinus gerardiana</u>	1	<u>Cotoneaster amoenus</u>	1
<u>Pinus pinea</u>	3	<u>Cotoneaster bullatus</u>	1
<u>Pinus ponderosa</u>	2	<u>Cotoneaster congestus</u>	1
<u>Pinus ponderosa</u> var. <u>ponderosa</u>	1	<u>Cotoneaster conspicuus</u>	1
<u>Pinus taeda</u>	1	<u>Cotoneaster dammeri</u>	2
<u>Salvia</u> cf. <u>verticillata</u>	1	<u>Cotoneaster dammeri</u> var. <u>radicans</u>	1
Los Lunas, New Mexico, PMC		<u>Cotoneaster dielsianus</u>	1
<u>Antheophora pubescens</u>	21	<u>Cotoneaster franchetti</u>	1
		<u>Cotoneaster harrismithii</u>	1
Manhattan, Kansas, PMC		<u>Cotoneaster hebephyllus</u>	1
<u>Atriplex canescens</u>	2	<u>Cotoneaster henryana</u>	2
<u>Biota orientalis</u>	1	<u>Cotoneaster horizontalis</u>	2
<u>Biota orientalis aurea</u>	1	<u>Cotoneaster integerrimus</u>	2
<u>Ceanothus americanus</u>	1	<u>Cotoneaster microphylla</u>	1
<u>Ceanothus foliosus</u>	1	<u>Cotoneaster multiflorus</u>	1
<u>Ceanothus impressus</u>	1	<u>Cotoneaster multiflorus</u> var. <u>calocarpus</u>	1
<u>Ceanothus thyrsiflorus</u>	2		

Manhattan, Kansas, PMC (cont'd.)

<u>Cotoneaster niger</u>	2	<u>Rosa acicularis</u>	1
<u>Cotoneaster nigra</u>	1	<u>Rosa agrestis</u>	1
<u>Cotoneaster salicifolia</u>	2	<u>Rosa arkansana</u>	1
<u>Cotoneaster splendens</u>	1	<u>Rosa canina</u>	14
<u>Cotoneaster sternianus</u>	1	<u>Rosa cinnamomea</u>	2
<u>Cotoneaster wardii</u>	1	<u>Rosa corymbifera</u>	1
<u>Cotoneaster X watereri</u>	1	<u>Rosa dumalis</u>	1
<u>Elaeagnus angustifolia</u>	1	<u>Rosa ecae</u>	1
<u>Elaeagnus angustifolia</u> <u>orientalis</u>	3	<u>Rosa eglanteria</u>	1
<u>Glycine ussuriensis</u>	1	<u>Rosa gallica</u>	1
<u>Lespedeza cuneata</u>	1	<u>Rosa gymnocarpa</u>	1
<u>Lespedeza hedysaroides</u>	1	<u>Rosa helenae</u>	1
<u>Lespedeza japonica</u>	1	<u>Rosa majalis</u>	2
<u>Lespedeza repens</u>	1	<u>Rosa micrantha</u>	2
<u>Lespedeza tomentosa</u>	1	<u>Rosa nitidula</u>	1
<u>Lespedeza virgata</u>	1	<u>Rosa pimpinellifolia</u>	1
<u>Lespedeza virginica</u>	1	<u>Rosa roxburghii</u>	1
<u>Penstemon digitalis</u>	2	<u>Rosa rubiginosa</u>	1
<u>Penstemon palmeri</u>	1	<u>Rosa rubrifolia</u>	1
<u>Penstemon strictus</u>	2	<u>Rosa rugosa</u>	1
<u>Phaseolus lathroides</u>	1	<u>Rosa sempervirens</u>	1
<u>Prunus americana</u>	1	<u>Rosa sicula</u>	1
<u>Prunus serotina</u>	4	<u>Rosa spinosissima</u>	3
<u>Prunus virginica</u>	1	<u>Rosa villosa</u>	1

Manhattan, Kansas, PMC (cont'd.)

<u>Rosa villosa</u> ssp. <u>mollis</u>	1	<u>Alopecurus arundinaceus</u>	2
<u>Rosa wichuraiana</u>	1	<u>Alopecurus geniculatus</u>	1
<u>Rosa wichuraiana</u> var. <u>poterifolia</u>	1	<u>Alopecurus pratensis</u>	3
<u>Rosa</u> sp.	5	<u>Alyssum saxatile</u>	1
<u>Strophostyles umbellata</u>	1	<u>Arctostaphylos uva-ursi</u>	4
<u>Thuja orientalis</u>	2	<u>Atriplex hortensis</u>	1
<u>Trifolium pratense</u>	2	<u>Atriplex litoralis</u>	2
<u>Trifolium repens</u>	1	<u>Aurinia saxatilis</u>	1
		<u>Beckmannia eruciformis</u>	2
Palmer, Alaska, PMC		<u>Betula glandulosa</u>	1
<u>Acer ginnala</u>	1	<u>Betula nana</u>	2
<u>Acer negundo</u>	4	<u>Betula nana</u> X <u>tortuosa</u>	1
<u>Acer negundo</u> var. <u>interius</u>	2	<u>Betula occidentalis</u>	1
<u>Agropyron pectiniforme</u>	13	<u>Betula occidentalis</u> var. <u>occidentalis</u>	1
<u>Agropyron subsecundum</u>	1	<u>Betula papyrifera</u>	3
<u>Agrostis alba</u>	1	<u>Betula papyrifera</u> ssp. <u>humilis</u>	1
<u>Agrostis canina</u>	1	<u>Betula papyrifera</u> var. <u>papyrifera</u>	1
<u>Agrostis gigantea</u>	2		
<u>Agrostis stolonifera</u>	1	<u>Betula pendula</u>	3
<u>Agrostis tenuis</u>	2	<u>Brassica juncea</u>	12
<u>Alnus incana</u>	2	<u>Brassica rapa</u>	2
<u>Alnus incana</u> ssp. <u>tenuifolia</u>	1	<u>Campanula rotundifolia</u>	8
<u>Alnus tenuifolia</u>	2	<u>Caragana arborescens</u>	2
<u>Alnus viridis</u> ssp. <u>sinuata</u>	1	<u>Carpinus caroliniana</u>	1

Palmer, Alaska, PMC (cont'd.)

<u>Chamaedaphne pisifera</u>	1	<u>Lathyrus maritimus</u> ssp. <u>acutifolius</u>	1
<u>Cheiranthus</u> X <u>allionii</u>	1	<u>Ligusticum scoticum</u>	3
<u>Cornus stolonifera</u>	2	<u>Loiseleuria procumbens</u>	1
<u>Cornus suecica</u>	4	<u>Lupinus succulentus</u>	1
<u>Deschampsia caespitosa</u>	1	<u>Malus baccata</u>	1
<u>Deschampsia flexuosa</u>	2	<u>Malus sylvestris</u>	1
<u>Diervilla lonicera</u>	1	<u>Malus</u> sp.	1
<u>Dryas drummondii</u>	3	<u>Medicago falcata</u>	5
<u>Dryas octopetala</u>	5	<u>Medicago lupulina</u>	1
<u>Elymus sibiricus</u>	3	<u>Medicago polymorpha</u> var. <u>polygyra</u>	1
<u>Empetrum nigrum</u> ssp. <u>hermaphroditum</u>	1	<u>Medicago polymorpha</u> var. <u>vulgaris</u>	16
<u>Festuca rubra</u>	5	<u>Medicago sativa</u>	6
<u>Fraxinus pennsylvanica</u>	1	<u>Medicago sativa</u> ssp. <u>caucasica</u>	8
<u>Gaillardia pulchella</u>	1	<u>Medicago sativa</u> ssp. <u>caerulea</u>	1
<u>Hedysarum alpinum</u>	1	<u>Medicago sativa</u> ssp. <u>falcata</u>	1
<u>Helianthus annuus</u>	11	<u>Medicago sativa</u> ssp. <u>falcata</u> var. <u>romanica</u>	1
<u>Iberis sempervirens</u>	1	<u>Medicago sativa</u> ssp. <u>glomerata</u>	1
<u>Juniperus communis</u>	1	<u>Medicago sativa</u> ssp. <u>sativa</u>	25
<u>Juniperus virginiana</u>	3	<u>Medicago sativa</u> ssp. <u>transoxana</u>	8
<u>Larix decidua</u>	2		
<u>Lathyrus japonicus</u>	2		
<u>Lathyrus japonicus</u> var. <u>glabra</u>	1		
<u>Lathyrus maritimus</u>	6		

Palmer, Alaska, PMC (cont'd.)

<u>Medicago sativa</u> X <u>varia</u>	1	<u>Poa subcaerulea</u>	1
<u>Melilotus alba</u>	12	<u>Poa trivialis</u>	1
<u>Melilotus arvensis</u>	1	<u>Populus tremula</u>	1
<u>Melilotus officinalis</u>	3	<u>Potentilla fruticosa</u>	3
<u>Penstemon diffusus</u>	2	<u>Prunus padus</u>	2
<u>Penstemon strictus</u>	1	<u>Prunus pennsylvanica</u>	1
<u>Phalaris arundinacea</u>	1	<u>Prunus virginiana</u> ssp. <u>demissa</u>	1
<u>Phalaris canariensis</u>	2	<u>Rhus aromatica</u>	1
<u>Phalaris minor</u>	1	<u>Rosa acicularis</u>	1
<u>Picea abies</u>	3	<u>Rosa rubrifolia</u>	1
<u>Picea engelmannii</u>	3	<u>Rosa rugosa</u>	1
<u>Picea glauca</u>	1	<u>Rosa woodsii</u> ssp. <u>ultramontana</u>	1
<u>Picea mariana</u>	1	<u>Rubus idaeus</u>	1
<u>Picea pungens</u>	2	<u>Rubus strigosus</u>	1
<u>Pinus banksiana</u>	2	<u>Rudbeckia hirta</u>	2
<u>Pinus contorta</u> var. <u>latifolia</u>	2	<u>Rudbeckia purpurea</u>	1
<u>Pinus flexilis</u>	1	<u>Salix alba</u>	1
<u>Pinus koraiensis</u>	1	<u>Salix arctica</u>	1
<u>Pinus mugo</u> var. <u>pumilio</u>	1	<u>Sorbus scopulina</u>	1
<u>Poa alpina</u>	2	<u>Sorbus sitchensis</u> ssp. <u>sitchensis</u>	1
<u>Poa angustifolia</u>	2	<u>Symphoricarpos albus</u>	3
<u>Poa glauca</u>	1	<u>Symphoricarpos albus</u> var. <u>albus</u>	1
<u>Poa palustris</u>	1		
<u>Poa pratensis</u>	10		

Palmer, Alaska, PMC (cont'd.)

<u>Thuja occidentalis</u>	3	<u>Acacia clivicola</u>	1
<u>Titia cordata</u>	2	<u>Acacia confusa</u>	1
<u>Trifolium agrarium</u>	3	<u>Acacia continua</u>	1
<u>Trifolium hybridum</u>	13	<u>Acacia cupularis</u>	1
<u>Trifolium pratense</u>	44	<u>Acacia cyclophylla</u>	1
<u>Trifolium repens</u>	1	<u>Acacia decurrens</u>	1
<u>Tsuga mertensiana</u>	1	<u>Acacia dunnii</u>	1
<u>Ulmus americana</u>	1	<u>Acacia extensa</u>	1
<u>Vaccinium vitis-idaea</u>	3	<u>Acacia graffiana</u>	1
<u>Viburnum edule</u>	1	<u>Acacia imbricata</u>	1
		<u>Acacia implexa</u>	1
Pullman, Washington, PMC		<u>Acacia jonesii</u>	1
<u>Artemisia tridentata</u> ssp. <u>tridentata</u>	1	<u>Acacia linifolia</u>	1
<u>Chrysothamnus nauseosus</u>	2	<u>Acacia longifolia</u> var. <u>sophorae</u>	1
<u>Purshia tridentata</u>	1	<u>Acacia mearnsii</u>	1
Tucson, Arizona, PMC		<u>Acacia microcarpa</u>	1
<u>Acacia albida</u>	3	<u>Acacia nilotica</u>	1
<u>Acacia aneura</u>	1	<u>Acacia notabilis</u>	1
<u>Acacia araneosa</u>	1	<u>Acacia oxycedrus</u>	1
<u>Acacia brachystachya</u>	1	<u>Acacia parramattensis</u>	1
<u>Acacia caesiella</u>	1	<u>Acacia penninervis</u>	1
<u>Acacia calamifolia</u>	3	<u>Acacia pycnantha</u>	1
<u>Acacia campylacantha</u>	1	<u>Acacia ramulosa</u>	1
<u>Acacia catechu</u>	1	<u>Acacia richi</u>	1

Tucson, Arizona, PMC (cont'd.)

<u>Acacia saliciformis</u>	1	<u>Callistemon linearis</u>	1
<u>Acacia saligna</u>	1	<u>Callistemon macropunctatus</u>	1
<u>Acacia scorpioides</u>	1	<u>Callistemon phoeniceus</u>	1
<u>Acacia sieberana</u> var. <u>woodii</u>	1	<u>Callistemon rigidus</u>	1
<u>Acacia silvestris</u>	1	<u>Callistemon salignus</u>	1
<u>Acacia stricta</u>	1	<u>Calothamnus asper</u>	1
<u>Acacia suaveolins</u>	1	<u>Calothamnus gilesii</u>	1
<u>Acacia subulata</u>	1	<u>Calothamnus homalophyllus</u>	1
<u>Acacia terminalis</u>	1	<u>Calothamnus lateralis</u>	1
<u>Acacia trineura</u>	1	<u>Calothamnus quadrifidus</u>	2
<u>Acacia uncinata</u>	1	<u>Calothamnus quadrifidus</u> var. <u>obtusus</u>	1
<u>Acacia verniciflua</u>	1	<u>Calothamnus validus</u>	1
<u>Acacia villosa</u>	1	<u>Calytrix brachyphylla</u>	1
<u>Albizia lophantha</u>	1	<u>Cassia aciphylla</u>	1
<u>Antheophora pubescens</u>	26	<u>Cassia artemisioides</u>	1
<u>Argemone alba</u>	1	<u>Cassia brewsteri</u>	1
<u>Argemone mexicana</u>	1	<u>Cassia mohrii</u>	1
<u>Aristida contorta</u>	1	<u>Cassia nemophila</u> var. <u>zygophylla</u>	1
<u>Atriplex canescens</u>	1	<u>Cassia odorata</u>	1
<u>Atriplex cordifolia</u>	1	<u>Cassia pleurocarpa</u>	1
<u>Atriplex lindleyi</u>	1	<u>Cassia sturtii</u>	1
<u>Atriplex nummularia</u>	1	<u>Casuarina acutivalis</u>	1
<u>Atriplex semibaccata</u>	1	<u>Casuarina corniculata</u>	1
<u>Callistemon citrinus</u>	1		

Tucson, Arizona, PMC (cont'd.)

<u>Casuarina helmsii</u>	1	<u>Eucalyptus cypellocarpa</u>	1
<u>Cercis siliquastrum</u>	2	<u>Eucalyptus dalrympleana</u> ssp. <u>dalrympleana</u>	1
<u>Clematis microphylla</u>	1	<u>Eucalyptus diversifolia</u>	2
<u>Coix lachryma-jobi</u>	1	<u>Eucalyptus dives</u>	1
<u>Crotalaria crassipes</u>	1	<u>Eucalyptus dumosa</u>	1
<u>Crotalaria eremaea</u>	1	<u>Eucalyptus elata</u>	1
<u>Dodonae lobulata</u>	1	<u>Eucalyptus ewartiana</u>	1
<u>Dodonae microzyga</u>	1	<u>Eucalyptus eximia</u>	1
<u>Dodonae stenozyga</u>	1	<u>Eucalyptus fastigata</u>	1
<u>Eragrostis speciosa</u>	1	<u>Eucalyptus foecunda</u>	1
<u>Eucalyptus agglomerata</u>	1	<u>Eucalyptus forrestiana</u>	1
<u>Eucalyptus alba</u>	1	<u>Eucalyptus fraxinoides</u>	1
<u>Eucalyptus amplifolia</u>	1	<u>Eucalyptus gillii</u>	2
<u>Eucalyptus anceps</u>	1	<u>Eucalyptus glaucescens</u>	1
<u>Eucalyptus andrewsii</u>	1	<u>Eucalyptus gongylocarpa</u>	1
<u>Eucalyptus angulata</u>	1	<u>Eucalyptus goniantha</u>	1
<u>Eucalyptus annulata</u>	1	<u>Eucalyptus goniocalyx</u>	3
<u>Eucalyptus calycogona</u>	1	<u>Eucalyptus gracilis</u>	1
<u>Eucalyptus camaldulensis</u>	1	<u>Eucalyptus gregsoniana</u>	1
<u>Eucalyptus campaspe</u>	1	<u>Eucalyptus haemastoma</u>	1
<u>Eucalyptus cloeziana</u>	1	<u>Eucalyptus incrassata</u>	2
<u>Eucalyptus conglobata</u> ssp. <u>fraseri</u>	1	<u>Eucalyptus kybeanensis</u>	1
<u>Eucalyptus consideniana</u>	1	<u>Eucalyptus laevopinea</u>	1
<u>Eucalyptus cosmophylla</u>	2	<u>Eucalyptus landsdowneana</u> ssp. <u>albopurpurea</u>	1

Tucson, Arizona, PMC (cont'd.)

<u>Eucalyptus</u> <u>langleyi</u>	1	<u>Eucalyptus</u> <u>pimpiniana</u>	1
<u>Eucalyptus</u> <u>lehmanii</u>	1	<u>Eucalyptus</u> <u>piperita</u>	1
<u>Eucalyptus</u> <u>leucoxylon</u> var. <u>macrocarpa</u>	1	<u>Eucalyptus</u> <u>platypus</u>	1
<u>Eucalyptus</u> <u>ligustrina</u>	1	<u>Eucalyptus</u> <u>platypus</u> var. <u>heterophylla</u>	1
<u>Eucalyptus</u> <u>longicornis</u>	1	<u>Eucalyptus</u> <u>porosa</u>	2
<u>Eucalyptus</u> <u>longifolia</u>	1	<u>Eucalyptus</u> <u>prava</u>	1
<u>Eucalyptus</u> <u>macarthurii</u>	1	<u>Eucalyptus</u> <u>punctata</u>	1
<u>Eucalyptus</u> <u>macrocarpa</u>	1	<u>Eucalyptus</u> <u>pyriformis</u> ssp. <u>youngiana</u>	1
<u>Eucalyptus</u> <u>maculata</u>	1	<u>Eucalyptus</u> <u>radiata</u> ssp. <u>radiata</u>	1
<u>Eucalyptus</u> X <u>mcintyrensis</u>	1	<u>Eucalyptus</u> <u>radiata</u> ssp. <u>robertsonii</u>	1
<u>Eucalyptus</u> <u>megacornuta</u>	1	<u>Eucalyptus</u> <u>saligna</u>	1
<u>Eucalyptus</u> <u>melliodora</u>	1	<u>Eucalyptus</u> <u>sclerophylla</u>	1
<u>Eucalyptus</u> <u>multicaulis</u>	1	<u>Eucalyptus</u> <u>sessilis</u>	1
<u>Eucalyptus</u> <u>neglecta</u>	1	<u>Eucalyptus</u> <u>sieberi</u>	1
<u>Eucalyptus</u> <u>obliqua</u>	1	<u>Eucalyptus</u> <u>socialis</u>	1
<u>Eucalyptus</u> <u>oblonga</u>	1	<u>Eucalyptus</u> <u>stellulata</u>	1
<u>Eucalyptus</u> <u>oleosa</u> var. <u>oleosa</u>	1	<u>Eucalyptus</u> <u>striaticalyx</u>	1
<u>Eucalyptus</u> <u>olsenii</u>	1	<u>Eucalyptus</u> <u>stricta</u>	1
<u>Eucalyptus</u> <u>oreades</u>	1	<u>Eucalyptus</u> <u>tetragona</u>	1
<u>Eucalyptus</u> <u>oxymitra</u>	2	<u>Eucalyptus</u> <u>torquata</u>	2
<u>Eucalyptus</u> <u>pauciflora</u> ssp. <u>pauciflora</u>	1	<u>Eucalyptus</u> <u>viridis</u>	1
<u>Eucalyptus</u> <u>pauciflora</u> ssp. <u>nov</u>	1	<u>Eucalyptus</u> <u>wandoo</u>	1
<u>Eucalyptus</u> <u>pileata</u>	1	<u>Eucalyptus</u> sp.	1

Tucson, Arizona, PMC (cont'd.)

<u>Genista monosperma</u>	1	<u>Melaleuca ericifolia</u>	1
<u>Gleditsia triacanthos</u>	1	<u>Melaleuca hamulosa</u>	1
<u>Gleditsia triancanthos</u> <u>inermis</u>	1	<u>Melaleuca huegelii</u>	1
<u>Hyparrhenia hirta</u>	1	<u>Melaleuca hypericifolia</u>	1
<u>Hyparrhenia</u> sp.	2	<u>Melaleuca lanceolata</u>	1
<u>Hypericum ascyron</u>	1	<u>Melaleuca lateritia</u>	2
<u>Hypericum beanii</u>	1	<u>Melaleuca microphylla</u>	1
<u>Isopogon cuneatus</u>	1	<u>Melaleuca ororia</u>	1
<u>Isopogon teretifolius</u>	1	<u>Melaleuca pentagona</u>	1
<u>Kennedia prostrata</u>	1	<u>Melaleuca platycalyx</u>	2
<u>Kunzea ambigua</u>	1	<u>Melaleuca pungens</u> var. <u>obtusifolia</u>	1
<u>Kunzea baxteri</u>	1	<u>Melaleuca serpyllifolia</u>	1
<u>Leptospermum coriaceum</u>	2	<u>Melaleuca sheathiana</u>	1
<u>Leptospermum erubescens</u>	1	<u>Melaleuca stricta</u>	1
<u>Leptospermum glabrescens</u>	1	<u>Melaleuca styphelioides</u>	1
<u>Leptospermum juniperinum</u>	1	<u>Melaleuca subfalcata</u>	1
<u>Leptospermum myrsinoides</u>	1	<u>Melaleuca thyoides</u>	1
<u>Leptospermum petersonii</u>	1	<u>Melaleuca uncinata</u>	1
<u>Leucaena latisiliqua</u>	10	<u>Melaleuca urceolaris</u>	1
<u>Melaleuca acuminata</u>	1	<u>Melaleuca viminea</u>	1
<u>Melaleuca corrugata</u>	1	<u>Melaleuca wilsonii</u>	1
<u>Melaleuca diosmifolia</u>	2	<u>Nicotiana velutina</u>	1
<u>Melaleuca eleutherostachya</u>	1		
<u>Melaleuca elliptica</u>	2		

Vegetative Material Shipped to PMC's

<u>Species</u>	<u>Number of Plants</u>
Cape May, New Jersey, PMC:	
<u>Calamagrostis arundinacea</u>	35
Knox City, Texas, PMC:	
<u>Paspalum plicatulum</u>	10
<u>Pennisetum clandestinum</u>	204
Lockeford, California, PMC:	
<u>Pinus densiflora</u>	7
<u>Pinus massoniana</u>	3

Bulk Seed Shipments

Cape May, New Jersey, PMC:

Panicum virgatum

108 lbs.

SCS Field Office, Union, West Virginia

Lespedeza bicolor

6 lbs.

Domestic Distribution--Non-SCS

<u>Name</u>	<u>PI or Other Number</u>	<u>Organization</u>	<u>Location</u>
<u>Lathyrus sativas</u>	PI-170477	National Cancer Inst.	Bethesda, Maryland
<u>Lathyrus sativas</u>	PI-193814	National Cancer Inst.	Bethesda, Maryland
<u>Lupinus luteus</u>	PI-316284	National Cancer Inst.	Bethesda, Maryland
<u>Lupinus luteus</u>	PI-316285	National Cancer Inst.	Bethesda, Maryland
<u>Vicia sativa</u>	PI-220917	National Cancer Inst.	Bethesda, Maryland
<u>Vicia sativa</u>	PI-223419	National Cancer Inst.	Bethesda, Maryland
<u>Engelmannia pinnatifida</u>		AMS-Seed Standr. Br.	Beltsville, Maryland
<u>Engelmannia pinnatifida</u>		AMS-Seed Standr. Br.	Beltsville, Maryland
<u>Salix glaucophylloides</u>	BN-13666	Worcester Polytechnic	Worcester, Massachusetts
<u>Salix glaucophylloides</u> var. <u>glaucophylla</u>	BN-13672	Worcester Polytechnic	Worcester, Massachusetts
<u>Salix humilis</u>	BN-22356	Worcester Polytechnic	Worcester, Massachusetts
<u>Salix purpurea</u>	BN-13687	Worcester Polytechnic	Worcester, Massachusetts
<u>Salix rigida</u>	BN-13659	Worcester Polytechnic	Worcester, Massachusetts
<u>Lindera benzoin</u>		Cornell University	Geneva, New York
<u>Viburnum lentago</u>		Cornell University	Geneva, New York
<u>Arrhenatherum elatius</u>	BN-6129	SEA Regional PI Sta.	Geneva, New York
<u>Arrhenatherum elatius</u>	BN-12305	SEA Regional PI Sta.	Geneva, New York
<u>Arrhenatherum elatius</u>	BN-16211	SEA Regional PI Sta.	Geneva, New York
<u>Arrhenatherum elatius</u>	BN-20510	SEA Regional PI Sta.	Geneva, New York
<u>Bromus marginatus</u> 'Bromar'		SEA Regional PI Sta.	Geneva, New York
<u>Dactylis glomerata</u> 'Latar'		SEA Regional PI Sta.	Geneva, New York
<u>Dactylis glomerata</u> 'Palestine'		SEA Regional PI Sta.	Geneva, New York
<u>Dactylis glomerata</u> 'Pomar'		SEA Regional PI Sta.	Geneva, New York
<u>Festuca ovina</u> 'Covar'		SEA Regional PI Sta.	Geneva, New York
<u>Festuca rubra</u> 'Viking'		SEA Regional PI Sta.	Geneva, New York
<u>Lolium perenne</u>	PI-107071	SEA Regional PI Sta.	Geneva, New York
<u>Lonicera periclymenum</u>	D-92	SEA Regional PI Sta.	Geneva, New York
<u>Lotus corniculatus</u> 'Mackinaw'		SEA Regional PI Sta.	Geneva, New York
<u>Lotus corniculatus</u> 'Cascade'		SEA Regional PI Sta.	Geneva, New York
<u>Lotus pedunculatus</u> 'Marshfield'		SEA Regional PI Sta.	Geneva, New York
<u>Phleum pratense</u> 'Drummond'		SEA Regional PI Sta.	Geneva, New York
<u>Phleum pratense</u> 'Climax'		SEA Regional PI Sta.	Geneva, New York

<u>Name</u>	<u>PI or Other Number</u>	<u>Organization</u>	<u>Location</u>
<u>Trifolium fragiferum</u>	PI-290729	SEA Regional PI Sta.	Geneva, New York
<u>Trifolium hybridum</u>	PI-291792	SEA Regional PI Sta.	Geneva, New York
<u>Trifolium hybridum</u>	PI-369143	SEA Regional PI Sta.	Geneva, New York
<u>Trifolium microdon</u>	PI-369144	SEA Regional PI Sta.	Geneva, New York
<u>Trifolium repens</u>	PI-346047	SEA Regional PI Sta.	Geneva, New York
<u>Vigna sp.</u>	PI-199375	SEA Regional PI Sta.	Geneva, New York
<u>Anthoxanthum odoratum</u>		Cornell University	Ithaca, New York
<u>Astragalus cicer</u> 'Lutana'		Cornell University	Ithaca, New York
<u>Festuca pratensis</u>	PI-380858	Cornell University	Ithaca, New York
<u>Lespedeza cuneata</u> 'Okinawa'		Cornell University	Ithaca, New York
<u>Lolium perenne</u> 'Argo'		Cornell University	Ithaca, New York
<u>Stipa viridula</u> 'Lodorm'		Cornell University	Ithaca, New York
<u>Trifolium incarnatum</u>	PI-284281	Cornell University	Ithaca, New York
<u>Trifolium repens</u>	PI-311494	Cornell University	Ithaca, New York
<u>Vicia villosa</u>	PI-340175	Cornell University	Ithaca, New York
<u>Agropyron elongatum</u> 'Orbit'		TAMU Agri. Res. Sta.	Pecos, Texas
<u>Adesmia muricata</u>	PI-238221	University of Virginia	Charlottesville, Va.
<u>Aerva tomentosa</u>	PI-249136	University of Virginia	Charlottesville, Va.
<u>Aeschynomene americana</u>	PI-219826	University of Virginia	Charlottesville, Va.
<u>Alyssum montanum</u>	PI-344559	University of Virginia	Charlottesville, Va.
<u>Anthyllis vulneraria</u>	PI-305506	University of Virginia	Charlottesville, Va.
<u>Arenaria graminifolia</u>	PI-292783	University of Virginia	Charlottesville, Va.
<u>Argemone mexicana</u>	T-6663	University of Virginia	Charlottesville, Va.
<u>Artemisia herba-alba</u>	PI-330692	University of Virginia	Charlottesville, Va.
<u>Aster novae-angliae</u>	T-2252	University of Virginia	Charlottesville, Va.
<u>Astragalus cicer</u>	PI-214095	University of Virginia	Charlottesville, Va.
<u>Baileya multirada</u>	T-1932	University of Virginia	Charlottesville, Va.
<u>Biserrula pelecinus</u>	PI-186264	University of Virginia	Charlottesville, Va.
<u>Briza media</u>	PI-369836	University of Virginia	Charlottesville, Va.
<u>Cerastium tomentosum</u>	T-6349	University of Virginia	Charlottesville, Va.
<u>Chrysanthemum leucanthemum</u>	T-1947	University of Virginia	Charlottesville, Va.
<u>Crambe abyssinica</u>	PI-247310	University of Virginia	Charlottesville, Va.

<u>Name</u>	<u>PI or Other Number</u>	<u>Organization</u>	<u>Location</u>
<u>Dactyloctenium aegyptium</u>	PI-271559	University of Virginia	Charlottesville, Va.
<u>Dalea oaxacana</u>	PI-315692	University of Virginia	Charlottesville, Va.
<u>Danthonia curva</u>	PI-238279	University of Virginia	Charlottesville, Va.
<u>Delphinium</u> (mixed)	T-1969	University of Virginia	Charlottesville, Va.
<u>Dianthus armeria</u>	T-1970	University of Virginia	Charlottesville, Va.
<u>Digitaria vestita</u>	PI-377758	University of Virginia	Charlottesville, Va.
<u>Echinopogon nutans</u>	PI-257717	University of Virginia	Charlottesville, Va.
<u>Eragrostis superba</u>	PI-364831	University of Virginia	Charlottesville, Va.
<u>Erinus alpinus</u>	T-7165	University of Virginia	Charlottesville, Va.
<u>Holcus lanatus</u>	PI-434071	University of Virginia	Charlottesville, Va.
<u>Juncus maritimus</u>	PI-365438	University of Virginia	Charlottesville, Va.
<u>Lechea tenuifloia</u>	T-7173	University of Virginia	Charlottesville, Va.
<u>Lotononis bainesii</u>	PI-234409	University of Virginia	Charlottesville, Va.
<u>Lotus corniculatus</u> 'Cascade'		Universiy of Virginia	Charlottesville, Va.
<u>Lychnis chalcedonica</u>	T-7184	University of Virginia	Charlottesville, Va.
<u>Medicago lupulina</u>	PI-302923	University of Virginia	Charlottesville, Va.
<u>Oenothera biennis</u>	T069	University of Virginia	Charlottesville, Va.
<u>Panicum amarulum</u>	PI-421136	University of Virginia	Charlottesville, Va.
<u>Paspalum nicorae</u> 'Amcorae'		University of Virginia	Charlottesville, Va.
<u>Penstemon digitalis</u>	T-7193	University of Virginia	Charlottesville, Va.
<u>Petalostemum purpureum</u> 'Kaneb'		University of Virginia	Charlottesville, Va.
<u>Portulacaria afra</u>	PI-407530	University of Virginia	Charlottesville, Va.
<u>Potentilla buccoana</u>	PI-297368	University of Virginia	Charlottesville, Va.
<u>Ratibida pinnata</u>	T-2130	University of Virginia	Charlottesville, Va.
<u>Rudbeckia hirta</u>	T-7083	University of Virginia	Charlottesville, Va.
<u>Salvia pitcheri</u>	PI-421551	University of Virginia	Charlottesville, Va.
<u>Sedum aizoon</u>	PI-292815	University of Virginia	Charlottesville, Va.
<u>Selago speciosa</u>	PI-203805	University of Virginia	Charlottesville, Va.
<u>Sesamum indicum</u>	PI-223817	University of Virginia	Charlottesville, Va.
<u>Setaria macrostachya</u>	PI-421049	University of Virginia	Charlottesville, Va.
<u>Trifolium armenium</u>	PI-253200	University of Virginia	Charlottesville, Va.
<u>Vernonia missurica</u>	PI-386011	University of Virginia	Charlottesville, Va.
<u>Veronica incana</u>	PI-434495	University of Virginia	Charlottesville, Va.

<u>Name</u>	<u>PI or Other Number</u>	<u>Organization</u>	<u>Location</u>
<u>Vicia melanops</u>	PI-349271	University of Washington	Seattle, Washington
<u>Vicia melanops</u>	BN-18962	University of Washington	Seattle, Washington
<u>Andropogon scoparius</u> 'Pastura'		National Park Service	Washington, D. C.
<u>Lespedeza bicolor</u> 'Natob'		West Virginia University	Keyser, West Virginia

Foreign Shipments

One of the functions of the NPMC is to assemble and distribute seed and plants to meet foreign requests. Requests may come directly to the NPMC, to field plant materials centers, or to plant materials specialists. Assembly of seed at the center prevents duplication since many times the person or organization places requests for the same material with several sources. It also allows the material to be shipped in one package, thus arriving at its destination as a unit.

When all seed or plants needed to fill a foreign request are acquired, proper paperwork is prepared and the material is transferred to the Plant Germplasm Quarantine Center of the Animal and Plant Health Inspection Service (APHIS) for inspection. When the material is cleared it is shipped to the requestor.

Listed below are the foreign shipments made during 1979.

Jorge J. Palma, Buenos Aires, Argentina

Tripsacum dactyloides, PMK-24

Sorghastrum nutans 'Osage'

Division of Plant Industry, Canberra City, Australia

Lespedeza cuneata, PI-421873

Lespedeza virgata 'Ambro'

Forage Crops Section, Research Station, Beaverlodge, Alberta, Canada

Bromus inermis 'Manchar'

Department of Plant Sciences, University of Western Ontario, London, Ontario, Canada

Calamovilfa longifolia 'Goshen'

Genetics Laboratory, McGill University, Ste. Anne de Bellevue, Quebec, Canada

Lotus purshianus, LK-509-74

Prairie Regional Laboratory, National Research Council, University Campus, Saskatoon, Saskatchewan, Canada

Bouteloua curtipendula 'Pierre'

Muhlenbergia wrightii 'El Vado'

Muhlenbergia wrightii, NM-216

Panicum texanum, F-639

Panicum texanum, BN-11637-67

Sporobolus airoides

Stipa viridula, P-15604

Soil Specialist, Department of Agriculture, Regina, Saskatchewan,
Canada

Elymus triticoides

Instituto De Investigaciones Agropecuarias, Santiago, Chile

Acacia greggii, blend

Atriplex canescens, PMT-1041

Atriplex canescens, P-15644

Atriplex canescens, NM-155

Atriplex canescens, NM-1093

Atriplex canescens, C-225

Atriplex canescens, NM-572

Atriplex canescens, NM-1241

Atriplex canescens, NM-812

Atriplex canescens, NM-621

Atriplex lentiformis, PI-330671

Atriplex polycarpa, PI-399192

Atriplex semibaccata 'Corto'

Eysenhardtia texana, PMT-629

Fallugia paradoxa, PMT-4258

Kochia prostrata, A-18227

Kochia prostrata, PI-314929

Leucaena retusa, PMT-632

Menodora scabra, A-17773

Pavonia lasiopetala, PMT-1229

Sutherlandia frutescens, PI-173177

Sutherlandia microphylla, PI-203806

English Clays Lovering Pochin & Co., Ltd., Cornwall, England

Lotus corniculatus 'Mackinaw'

Lotus corniculatus 'Cascade'

Lotus corniculatus 'Empire'

Lotus corniculatus 'Viking'

Lotus corniculatus 'Granger'

Lotus corniculatus var. arvensis 'Kalo'

Lotus pedunculatus 'Marshfield'

Plant Breeding Department, Dunns Seed & Grain Ltd., Wiltshire,
England

Bromus carinatus, BN-6398

Bromus marginatus, BN-20557

Bromus marginatus 'Bromar'

Bromus sub. nom. sitchensis, BN-20568

Bromus unioloides, BN-1191

Bromus unioloides, BN-20546

Bromus unioloides, BN-20575

Bromus unioloides, PI-385317

Bromus cf. valdivianus, BN-20573

Astragalus chinensis, PI-89399

Astragalus cicer, T-6508

Astragalus cicer 'Lutana'

Astragalus falcatus, PI-66440

Astragalus falcatus, T-6676

Astragalus falcatus, T-6677

Astragalus glycyphyllos, PI-297337

Astragalus glycyphyllos, PI-325207

Astragalus sinicus, PI-150557

Cajanus cajan, PI-218066

Canavalia ensiformis, PI-368146

Canavalia gladiata, PI-338585

Crotalaria juncea, T-6760

Dolichos lablab, PI-319473

Hedysarum hedysaroides, PI-314089

Lupinus polyphyllus, PI-414242

Phaseolus lunatus, PI-186340

Prosopis juliflora, BN-23409

Pueraria lobata, PI-186600

Pueraria phaseoloides, PI-291132

Sesbania punicea, PI-322628

Sesbania sesban, PI-271227

Sesbania speciosa, PI-219851

Trifolium subterraneum, PI-268067

Trifolium subterraneum, PI-311499

Trifolium foenum-graecum, PI-199990

Trifolium vexillata, PI-365096

Hankkijan Kasvinjalostuslaitos, Hankkija Plant Breeding Institute,
Hyryla, Finland

Vicia narbonensis, PI-170017

Vicia narbonensis, PI-203156

Vicia narbonensis, PI-225732

Vicia narbonensis, PI-230275

Vicia narbonensis, PI-290739

Vicia narbonensis, PI-294297

Vicia narbonensis, PI-294302

Vicia narbonensis, PI-294303

Vicia narbonensis, PI-303064

Vicia narbonensis, PI-314503

Vicia narbonensis, PI-340146

Vicia narbonensis, PI-340147

Vicia narbonensis, PI-340149

Vicia narbonensis, PI-340150

Vicia narbonensis, PI-340151

Vicia narbonensis, PI-340152

Vicia narbonensis, PI-340153

Vicia narbonensis, PI-340154

Vicia narbonensis, PI-340155

Vicia narbonensis, PI-340156

Vicia narbonensis, PI-349272

Mr. Guy Dhommee, Agriculteur, Clamart, France

Lespedeza capitata, NJ-177

Ministerio de Agricultura, Quetzaltenango, Guatemala

Agropyron dasystachyum 'Critana'

Agropyron desertorum 'Nordan'

Agropyron inerme 'Whitmar'

Agropyron intermedium 'Greenar'

Agropyron riparium 'Sodar'

Agropyron sibiricum 'P-27'

Agropyron smithii 'Barton'

Agropyron trachycaulum 'Primar'

Agropyron trichophorum 'Luna'

Agropyron trichophorum 'Topar'

Elymus junceus 'Vinall'

Agriculture & Fisheries Department, Hong Kong Government, Kowloon,
Hong Kong

Atriplex semibaccata 'Corto'

Cytogenetics Section, Agril. College, Bangalore, India

Dolichos axillaris, PI-364785

Dolichos baumannii, PI-283250

Dolichos falcatus, PI-364788

Dolichos formosus, PI-319472

Dolichos lablab, PI-401553

Dolichos lignosus, PI-178238

Dolichos uniflorus, PI-364789

International Cooperation Group on Sand Dune Reclamation, Haifa,
Israel

Elymus vancouverensis, NJ-425

Dr. Gilberto Golinelli, Bologna, Italy

Pueraria lobata, AM-3115

Centro Regionale Agrario Sperimentale, Alberti, Italy

Phalaris aquatica, BN-10873

Lesotho Agricultural College, Maseru, Lesotho

Astragalus cicer 'Cicar'

Rancho Experimental La Campana, Chihuahua, Mexico

Andropogon barbinodis, PMT-33

Andropogon scoparius, PMT-1236

Atriplex canescens, PMT-1041

Bothriochloa ischaemum 'Plains'

Bouteloua curtipendula, PMT-328

Bouteloua curtipendula, PMT-470

Bouteloua gracilis, PMT-697

Buchloe dactyloides, PMT-1181

Cassia fasciculata, PMT-1985

Cenchrus ciliaris 'Higgins'

Cenchrus ciliaris 'Nueces'

Desmanthus illinoensis, PMT-2851

Desmanthus velutinus, PMT-2406

Dichanthium sp., PMT-587

Engelmannia pinnatifida, PMT-874

Eragrostis pilifera 'Mason'

Helianthus maximiliani 'Aztec'

Panicum coloratum 'Selection 75'

Panicum virgatum 'Alamo'

Simsia calva, PMT-856

Sorghastrum nutans, PMT-802

Trichachne californica, PMT-389

J. C. Memmott, Viveros Nuevo Casas Grandes, Chihuahua, Mexico

Bouteloua eriopoda 'Nogal'

State Department, Kathmandu, Nepal

Agropyron desertorum 'Nordan'

Agropyron sibiricum 'P-27'

Agropyron trachycaulum 'Primar'

Agropyron trichophorum 'Luna'

Festuca ovina duriuscula 'Durar'

Poa ampla 'Sherman'

Black Forest Station, South Canterbury, New Zealand

Agropyron cristatum 'Nordan'

Agropyron smithii 'Arriba'

Atriplex canescens, NM-155

Atriplex canescens, NM-812

Bothriochloa ischaemum 'Ganada'

Bouteloua curtipendula, NM-368

Bouteloua curtipendula 'Vaughn'

Bouteloua eriopoda 'Nogal'

Bouteloua gracilis, NM-118

Bouteloua gracilis 'Lovington'

Cercocarpus montanus 'Montane'

Eurotia lanata, NM-333

Hilaria jamesii 'Viva'

Oryzopsis hymenoides 'Paloma'

Sanguisorba minor, A-14173

Sporobolus airoides, NM-184

Sporobolus airoides, C-14

Sporobolus wrightii, A-3659

Yucca elata 'Bonita'

Marine Fish Division, Bedford Institute, Dartmouth, Nova Scotia

Panicum amarulum, PI-421136

Cereal and Forage Crops, Research Branch, Experimental Farm, Nappan,
Nova Scotia

Lotus corniculatus 'Mackinaw'

Estacao de Melhoramento de Plantas, Elvas, Portugal

Hedysarum coronarium, BN-15610

Hedysarum coronarium, PI-283343

Onobrychis viciifolia 'Perly'

Onobrychis viciifolia, PI-171726

Phalaris aquatica, BN-10872

Phalaris aquatica, BN-10873

USAID, United States Embassy, Mogadiscio, Somalia

Alysicarpus vaginalis, PI-219829

Alysicarpus vaginalis, PI-257667

Prosopis tamarugo, T-01467

Agropyron desertorum 'Nordan'

Agropyron elongatum 'Alkar'

Agropyron smithii 'Rosana'

Dactylis glomerata 'Berber'

Ehrharta calycina 'Mission'

Eragrostis lehmanniana 'A-68'

Oryzopsis hymenoides 'Nezpar'

Germination Test Results on NPMC Seed Inventory

In 1979 germination tests were conducted to determine the quality of seed harvested at the center in 1978. In conjunction with this, seed on inventory from previous years of the same species as those produced in 1978 was tested. This allowed full utilization of the germination cabinet and will provide valuable information on viability of aging seed. The results will be used to determine when certain lots of seed need to be reproduced to maintain viability. Also, seed that display no or very low germination can be discarded thus reducing the seed inventory and increasing efficiency.

Grasses

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Agropyron smithii</u>		<u>Antheophora pubescens</u>	
BN-10876-72	82	PI-414433-78	2
BN-16317-72	59	PI-414435-78	0
PI-421274-67	11	PI-414436-78	0
PI-421274-70	18	PI-414438-78	4
PI-432399-69	24	PI-414439-78	1
PI-432399-73	54	PI-414440-78	0
PI-432400-69	18		
PI-432400-73	18	<u>Aristida plumosa</u>	
<u>Agrostis tenuis</u>		BN-15856-64	16
BN-6822-60	87	<u>Arundinella anomala</u>	
BN-6822-67	98		
BN-20494-75	100	BN-11260-60	76
<u>Ammophila breviligulata</u>		<u>Bothriochloa caucasica</u>	
BN-9026-64	42	PI-78578-63	26
		PI-78578-64	24
<u>Ampelodesmos mauritanicus</u>		<u>Bothriochloa ischaemun</u>	
BN-15607-64	20	PI-380756-78	2
<u>Antheophora pubescens</u>		PI-380757-78	18
PI-364380-70	26	PI-406642-78	14
PI-390955-74	48	PI-406643-78	6
PI-409111-76	44	<u>Bouteloua curtipendula</u>	
PI-414425-76	0	BN-1797-64	60
PI-414441-78	13	BN-1797-67	70
PI-414445-78	4	BN-2524-66	62
PI-414420-78	52	BN-2524-70	27
PI-414425-78	10	BN-5441-72	78
PI-414429-78	60	BN-10721-72	63
PI-414430-78	64	BN-16178-72	81
PI-414433-78	24	BN-17989-66	72
PI-414434-78	0	PI-421281-60	58
PI-414437-78	0	PI-421281-67	63
PI-414442-78	6	PI-421281-72	65
PI-414443-78	2		
PI-414444-78	40	<u>Brachypodium phoenicoides</u>	
PI-409111-78	3	BN-20524-75	8
PI-414421-78	0		
PI-414419-78	12	<u>Brachypodium species</u>	
PI-414422-78	0		
PI-414424-78	2	BN-15860-64	42
PI-414426-78	0	PI-384806-73	80
PI-414427-78	0		
PI-414428-78	1		
PI-414429-78	2		
PI-414432-78	0		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number and Seed Year</u>	<u>Percent Germination</u>
<u>Briza australis</u>		<u>Elymus arenarius</u>	
BN-20528-73	22	PI-319819-69	4
		PI-319819-72	16
<u>Briza maxima</u>		PI-345979-73	16
BN-19208-69	16	PI-348865-73	38
		PI-348865-74	80
<u>Briza media</u>		<u>Elymus canadensis</u>	
PI-369835-74	32	BN-2842-66	0
PI-369837-75	68	BN-3009-61	0
PI-369839-74	56		
PI-369840-74	24	<u>Elymus glaucus</u>	
<u>Bromus diandrus</u>		BN-20615-73	8
BN-20543-74	74	<u>Elymus paboanus</u>	
<u>Bromus japonicus</u>		PI-316234-68	42
BN-18202-76	68	PI-316234-69	64
<u>Bromus madritensis</u>		<u>Elymus patagonicus</u>	
BN-20556-74	68	PI-297898-66	14
<u>Bromus veralis</u>		<u>Elymus salinas</u>	
BN-8001-69	2	BN-14618-62	6
<u>Calamagrostis arundinacea</u>		<u>Elymus sibiricus</u>	
PI-345968-78	92	PI-326266-67	8
<u>Dactyloctenium giganteum</u>		<u>Eragrostis atrovirens</u>	
PI-364505-70	8	BN-19638-66	12
<u>Danthoniopsis dinteri</u>		<u>Eragrostis bicolor</u>	
PI-364506-75	76	PI-409817	88
		PI-409817-78	68
<u>Deschampsia media</u>		<u>Eragrostis domingensis</u>	
BN-20603-73	4	BN-20627-72	87
<u>Digitaria chenaliara</u>		<u>Eragrostis heteromera</u>	
PI-364517-75	84	PI-410319-78	36
<u>Digitaria species</u>		<u>Eragrostis lehmanniana</u>	
PI-361875-78	8	BN-12084-78	44
<u>Echinopogon nutans</u>		<u>Eragrostis superba</u>	
PI-257717-60	20	PI-364833-77	80
PI-257717-70	60	PI-364833-78	72
<u>Elymus akmolinensis</u>		<u>Eragrostis species</u>	
BN-20609-74	60	BN-8965-60	56

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Erianthus coarctatus</u>		<u>Lamarkia aurea</u>	
BN-18759-67	48	BN-20704-73	80
<u>Eriochloa crebra</u>		<u>Lasiochloa longifolia</u>	
PI-257735-60	58	PI-368890-71	12
		PI-368891-71	28
<u>Eulalia fulva</u>		<u>Leptochloa dubia</u>	
PI-249139-59	52	BN-14773-61	56
PI-249139-75	52	PI-421042	4
<u>Eulaliopsis binata</u>		<u>Lolium remotum</u> var. <u>aristatum</u>	
PI-244666-59	16	BN-20708-76	56
<u>Festuca ampla</u>		<u>Melica ciliata</u> ssp. <u>magnolii</u>	
BN-20634-73	78	BN-20715-74	44
<u>Festuca arundinacea</u>		<u>Melica persica</u> ssp. <u>inaequiglumis</u>	
PI-380843-78	60	PI-384897-72	16
<u>Festuca glauca</u> ssp. <u>glauca</u>		<u>Ottochloa nodosa</u>	
BN-20649-74	36	PI-259417-60	68
<u>Festuca ovina</u>		<u>Panicum anceps</u>	
PI-380854-78	34	BN-8456-61	86
<u>Festuca pratensis</u>		BN-8456-64	80
PI-383657-78	80	BN-8456-75	80
<u>Festuca sulcata</u> ssp. <u>pseudodalmatica</u>		BN-8456-76	82
BN-20676-76	62	BN-13552-64	72
<u>Festuca sulcata</u> ssp. <u>vallesiana</u>		BN-13552-65	80
BN-20675-75	80	BN-13553-64	50
BN-20675-76	48	BN-13553-65	80
<u>Festuca supina</u>		<u>Panicum capillare</u>	
BN-20678-76	72	BN-20735-74	62
<u>Festuca violacea</u> var. <u>picta</u>		<u>Panicum deustum</u>	
BN-20683-74	32	PI-410226-78	70
BN-20683-75	48	<u>Panicum plenum</u>	
<u>Hyparrhenia hirta</u>		BN-18600-67	28
PI-273930-78	20	<u>Panicum texanum</u>	
<u>Ischaemum indicum</u> var. <u>longipilum</u>		BN-11637-67	54
BN-14805-64	60	<u>Panicum virgatum</u>	
		PI-315724-69	68
		PI-315724-75	82
		PI-315725-66	58
		PI-315725-75	24
		PI-315725-78	65

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Panicum virgatum</u>		<u>Panicum virgatum</u> var. <u>cubense</u>	
PI-421138-74	13	BN-18582-69	80
PI-421138-75	15	BN-18582-75	54
PI-421138-77 (H)	23.5	BN-18582-77	48
PI-421138-77 (D-Early)	11	PI-315727-61	24
PI-421138-77 (D-Late)	10	PI-315727-62	4
PI-421138-78 (Light)	0	PI-315727-64	36
PI-421138-78 (Broken)	7.5	PI-315727-65	80
PI-421520-71	56.5	PI-315728-67	56
PI-422016-66	70	PI-315728-69	72
PI-422016-71	93	PI-315728-75	66
PI-422016-72	45		
BN-8354-74	14	<u>Phalaris arundinacea</u>	
BN-8354-77	64		
BN-8357-75	74	PI-345662-78	80
BN-8357-76	68		
BN-8574-66	62.5	<u>Phalaris canariensis</u>	
BN-8617-75	46		
BN-8617-77	93	PI-380166-78	28
BN-9011-75	62		
BN-9984-77	60	<u>Piptochaetium lejopodun</u>	
BN-9985-77	62		
BN-10864-65	36	PI-368989-73	56
BN-11361-64	18		
BN-11361-76	37	<u>Piptochaetium montevidense</u>	
BN-11361-76	66		
BN-11361-77	80	PI-368990-74	28
BN-11362-75	62		
BN-12123-60	32	<u>Poa alpina</u>	
BN-14669-77	84		
BN-17965-66	74	PI-284251-78	32
BN-17965-68	76		
BN-17965-69	68	<u>Poa badensis</u>	
BN-17966-66	34		
BN-18943-67	36	BN-20755-78	28
BN-19530-69	37		
		<u>Poa compressa</u>	
<u>Panicum virgatum</u> var. <u>cubense</u>		Commercial	60
SC-58-23-63	18		
BN-9195-66	58	<u>Poa nemoralis</u>	
BN-10997-71	10		
BN-12105-61	16	BN-20766-78	84
BN-12105-75	76	PI-290727-78	80
BN-12105-76	68		
BN-12106-75	46	<u>Poa subcaerulea</u>	
BN-12107-61	36		
BN-12107-76	41	BN-20772-75	96
BN-12107-A-77	76		
BN-12107-C-77	56	<u>Psilurus aristatus</u>	
BN-12107-D-77	70		
BN-12108-75	72	BN-20782-73	64
BN-12108-76	72		
BN-12109-61	28	<u>Sesleria heufleriana</u>	
BN-12109-75	41	PI-314105-65	30
BN-12109-76	22	PI-314105-69	4
BN-12110-61	44		
BN-12110-75	80	<u>Setaria macrostachya</u>	
BN-12111-61	30		
BN-12111-75	52	BN-14775-63	9
BN-12111-76	70	PI-421049-60	38
BN-18582-66	2		
BN-18582-67	70	<u>Sporobolus asper</u> var. <u>hookeri</u>	
BN-18582-67	17		
BN-18582-68	64	BN-22381-71	100

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Sporobolus asper</u> var. <u>hookeri</u>		<u>Adesmia tenella</u>	
BN-22382-71	100	PI-285113-65	36% and 48% hard seed
<u>Themeda triandra</u>		PI-285114-65	84
PI-4-0373-78	8	PI-285114-75	32
<u>Thuarea involuta</u>		<u>Aeschynomene americana</u>	
PI-318746-67	70	BN-7013-50	7% and 4% hard seed
<u>Tricholaena monachne</u>		PI-219826-58	2% and 20% hard seed
PI-166381-58	8	<u>Aeschynomene falcata</u>	
<u>Legumes and Others</u>		PI-364378-70	32% and 68% hard seed
<u>Achillea asiatica</u>		<u>Aeschynomene indica</u>	
PI-380611-72	8	PI-257662-65	24% and 8% hard seed
<u>Achillea conferta</u>		<u>Aeschynomene paniculata</u>	
PI-380610-72	96	PI-322288-66	24% and 4% hard seed
<u>Achillea santolina</u>		<u>Aeschynomene species</u>	
PI-380612-72	100	PI-322294-66	60% and 24% hard seed
PI-380614-72	92	<u>Alyssum murale transylvanica</u>	
<u>Achillea species</u>		BN-18101-70	8
PI-380613-72	80	BN-18101-71	16
PI-383527-73	64	<u>Anthyllis tetraphylla</u>	
PI-383528-73	32	PI-292846-65	78
<u>Adenocarpus foliolosus</u>		PI-297878-65	94
PI-368849-71	20% and 48% hard seed	<u>Anthyllis vulneraria</u>	
<u>Adesmia angustifolia</u>		PI-283184-68	38% and 56% hard seed
PI-283159-61	8% and 4% hard seed	<u>Arachis species</u>	
PI-285103-65	68% and 24% hard seed	PI-263393-78	75
PI-285104-65	24% and 28% hard seed	<u>Arenaria serpyllifolia</u>	
PI-285104-75	48% and 24% hard seed	PI-292786-62	80
PI-285105-65	4% and 80% hard seed	<u>Argemone alba</u>	
PI-285105-75	56% and 12% hard seed	BN-14687-62	42
<u>Adesmia bicolor</u>		<u>Argemone mexicana</u>	
PI-409099-75	10% and 30% hard seed	BN-22609-62	82
<u>Adesmia muricata</u>		<u>Argyrolobium linnaeanum</u>	
PI-186274-75	4% and 96% hard seed	PI-302847-63	20% and 48% hard seed
PI-285110-65	8% and 92% hard seed	<u>Argyrolobium uniflorum</u>	
<u>Adesmia tenella</u>		PI-233223-57	8% and 36% hard seed
PI-285112-65	80		
PI-285112-75	32% and 8% hard seed		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Argyrolobium virgatum</u>		<u>Cassia abbreviata</u>	
PI-199311-57	0% to 64% hard seed	PI-315883-66	0% and 30% hard seed
<u>Atylosia mormorata</u>		<u>Cassia bonariensis</u>	
BN-16457-60	60% and 20% hard seed	PI-214042-62	28% and 16% hard seed
<u>Atylosia scarabaeoides</u>		<u>Cassia fasciculata</u>	
BN-11632-58	30% and 20% hard seed	BN-7005-50	0
BN-11632-59	42% and 6% hard seed	BN-7028-60	0
BN-11632-62	58% and 16% hard seed	BN-18540-67	5% and 58% hard seed
<u>Baileya multirada</u>		<u>Cassia hirsuta</u>	
BN-22726-72	36	PI-247405-62	0% and 6% hard seed
BN-22726-75	24	PI-247405-69	24% and 76% hard seed
<u>Bauhinia fassoglensis</u>		<u>Cassia laevigata</u>	
PI-277495-61	40	PI-198610-68	32% and 56% hard seed
<u>Biserrula pelecinus</u>		<u>Cassia leshenaultiana</u>	
PI-275406-68	24% and 60% hard seed	PI-204365-58	0
PI-276904-68	24% and 60% hard seed	<u>Cassia mimosoides</u>	
PI-287776-68	12% and 80% hard seed	BN-11633-62	0
PI-287777-62	12% and 52% hard seed	PI-207716-56	16% and 4% hard seed
PI-287778-68	44% and 48% hard seed	<u>Cassia patellaria</u>	
PI-287779-68	24% and 76% hard seed	PI-204367-58	0
PI-287780-62	24% and 72% hard seed	<u>Cassia pleurocarpa</u>	
PI-287781-62	30% and 60% hard seed	PI-238253-59	68
PI-287782-62	14% and 76% hard seed	<u>Cassia rotundifolia</u>	
PI-365645-73	76	BN-11634-62	0
PI-365647-73	32% and 44% hard seed	<u>Cassia tomentosa</u>	
PI-186284-62	36% and 48% hard seed	BN-5305-45	16% and 36% hard seed
PI-287777-63	21% and 68% hard seed	<u>Cassia uniflora</u>	
<u>Blackiella conduplicata</u>		PI-188874-49	75% and 5% hard seed
PI-415865-78	4	PI-188874-69	44% and 24% hard seed
<u>Caragana arforescens</u>		<u>Centaurea maculosa</u>	
T-6710-62	80	BN-22493-73	44
<u>Caragana boisi</u>		<u>Centaurea montana</u>	
PI-310388-65	70	BN-22567-72	20% and 56% hard seed
<u>Caragana microphylla</u>		<u>Cerastrus orhiculata</u>	
PI-107664-58	4	Commercial-70	0
<u>Carex macrochaeta</u>			
BN-4032-57	0		
<u>Carex pseudocyperus</u>			
BN-20449-73	68		
<u>Carex species</u>			
PI-383624-78	84		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Ceratonia siliqua</u>		<u>Coronilla viminalis</u>	
PI-365410-70	10% and 70% hard seed	PI-246729-58	72% and 25% hard seed
<u>Chrysanthemum leucanthemum</u>		<u>Crambe abyssinica</u>	
BN-23266-73	80	PI-247310-73	96
<u>Cistus villosus</u>		<u>Crepis kotschyana</u>	
T-6362-69	72% and 28% hard seed	PI-310392-68	64
<u>Clitoria rubiginosa</u>		<u>Crotalaria alata</u>	
PI-298605-68	80	PI-249681-60	32% and 24% hard seed
<u>Clitoria ternatea</u>		<u>Crotalaria anagyroides</u>	
BN-8653-56	8% and 24% hard seed	PI-219834-62	8
PI-209591-62	20	PI-316951-65	28% and 52% hard seed
PI-209592-62	10	PI-316952-65	24% and 44% hard seed
PI-227163-57	24% and 32% hard seed	PI-316955-65	28% and 72% hard seed
PI-258379-63	30% and 50% hard seed	PI-336998-67	90
PI-283231-66	0	<u>Crotalaria angyrolobioides</u>	
PI-283232-66	40	PI-200216-53	2% and 16% hard seed
PI-283233-64	10% and 10% hard seed	PI-200216-56	4% and 76% hard seed
PI-283234-66	20	<u>Crotalaria astragalina</u>	
PI-283236-66	15% and 25% hard seed	PI-199321-61	0% and 98% hard seed
PI-275316-60	30	PI-257694-61	84
PI-319465-66	60% and 30% hard seed	PI-274945-59	68% and 4% hard seed
PI-322366-68	28% and 48% hard seed	<u>Crotalaria atrorubens</u>	
<u>Colutea arforescens</u>		PI-274946-60	0% and 92% hard seed
BN-21630-70	8% and 24% hard seed	<u>Crotalaria eriocarpa</u>	
<u>Coreopsis grandiflora</u>		PI-316956-65	56% and 32% hard seed
BN-22569-74	72	PI-322374-66	28% and 60% hard seed
<u>Coronilla cretica</u>		<u>Crotalaria falcata</u>	
PI-104564-48	7% and 17% hard seed	PI-247123-60	12% and 84% hard seed
<u>Coronilla scorpioides</u>		<u>Crotalaria grantiana</u>	
T-6741-78	40% and 60% hard seed	PI-316937-65	40% and 12% hard seed
PI-186299-62	60% and 40% hard seed	PI-316938-65	68% and 24% hard seed
<u>Coronilla varia</u>		PI-322375-66	28% and 20% hard seed
PI-121119-44	12% and 52% hard seed	PI-322376-66	48% and 24% hard seed
PI-121119-74	36% and 62% hard seed	<u>Crotalaria incana</u>	
PI-286203-65	12% and 68% hard seed	BN-8576-56	32% and 44% hard seed
PI-308009-69	56% and 32% hard seed	BN-8576-61	22% and 70% hard seed
PI-344573-71	16% and 60% hard seed	BN-9085-56	0
PI-344573-72	24% and 68% hard seed	BN-9085-65	12% and 32% hard seed
PI-380805-78	44% and 48% hard seed	PI-182795-61	0% and 98% hard seed
PI-380806-78	24% and 52% hard seed	PI-192955-62	7% and 93% hard seed
PI-380809-72	56% and 36% hard seed	PI-199323-51	24% and 70% hard seed
PI-380809-78	28% and 40% hard seed	PI-199323-56	44% and 44% hard seed
PI-380809-75	54% and 26% hard seed		
PI-384836-78	22% and 52% hard seed		
PI-384840-78	40% and 58% hard seed		
PI-400297-78	30% and 64% hard seed		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Crotalaria incana</u>		<u>Crotalaria retusa</u>	
PI-199326-51	20% and 72% hard seed	PI-274951-61	54% and 46% hard seed
PI-199326-56	24% and 52% hard seed	PI-274951-67	1% and 31% hard seed
PI-200215-57	0% and 92% hard seed	BN-14695-62	14% and 2% hard seed
PI-244278-52	2% and 80% hard seed		
PI-244278-57	18% and 38% hard seed	<u>Crotalaria saltiana</u>	
<u>Crotalaria intermedia</u>		PI-316942-65	36% and 56% hard seed
PI-238266-58	0% and 8% hard seed	PI-316943-65	36% and 44% hard seed
BN-14740-65	4% and 30% hard seed	PI-322386-66	32% and 68% hard seed
<u>Crotalaria juncea</u>		PI-322387-66	4% and 48% hard seed
BN-274948-59	20	PI-322388-66	4% and 96% hard seed
BN-316208-65	70	PI-322389-66	0% and 92% hard seed
<u>Crotalaria laburnifolia</u> ssp. <u>australia</u>		<u>Crotalaria sericea</u>	
BN-364466-70	10% and 70% hard seed	PI-238268-58	34% and 2% hard seed
<u>Crotalaria lanceolata</u>		PI-238268-62	20% and 12% hard seed
PI-316939-65	24% and 76% hard seed	<u>Crotalaria spectabilis</u>	
PI-316940-65	0% and 92% hard seed	PI-316944-65	36% and 60% hard seed
PI-316954-65	40% and 60% hard seed	PI-316945-65	70% and 20% hard seed
PI-322378-66	20% and 72% hard seed	PI-322403-66	20% and 80% hard seed
PI-322409-66	8% and 92% hard seed	BN-8866-58	26% and 24% hard seed
PI-364468-70	0% and 80% hard seed	<u>Crotalaria stipularia</u>	
<u>Crotalaria leioloba</u>		PI-316946-65	32% and 20% hard seed
PI-217907-62	2% and 94% hard seed	PI-316947-65	52% and 16% hard seed
<u>Crotalaria medicaginea</u>		PI-316948-65	20% and 60% hard seed
PI-275318-67	40% and 60% hard seed	<u>Crotalaria trifoliatrum</u>	
<u>Crotalaria muconata</u>		PI-238269-62	80
PI-199322-62	12% and 64% hard seed	<u>Crotalaria usoramoensis</u>	
PI-209030-52	0% and 100% hard seed	PI-168575-59	6% and 10% hard seed
<u>Crotalaria ochroleuca</u>		PI-168575-61	23% and 25% hard seed
PI-248455-60	4% and 80% hard seed	PI-316949-65	48% and 40% hard seed
PI-274767-60	4% and 94% hard seed	BN-10815-61	11% and 22% hard seed
<u>Crotalaria paulina</u>		<u>Crotalaria vitellina</u>	
PI-316941-65	68% and 20% hard seed	BN-5831-62	36% and 48% hard seed
<u>Crotalaria pumila</u>		<u>Crotalaria species</u>	
BN-5833-61	0% and 100% hard seed	PI-316953-65	80
BN-1293-48	2% and 23% hard seed	PI-409729-76	10% and 80% hard seed
<u>Crotalaria quinquefolia</u>		PI-409731-76	8% and 80% hard seed
PI-270287-60	80	PI-409731-78	4
<u>Crotalaria retusa</u>		<u>Cyamopsis tetragonoloba</u>	
PI-238267-62	26% and 16% hard seed	PI-275088-60	80
		PI-275322-60	80
		PI-275323-60	96
		<u>Cyperus escutentus</u>	
		PI-337550-68	0
		PI-378899-72	80

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Dalea alopecuroides</u>		<u>Desmodium sandwicense</u>	
PI-315689-68	8% and 92% hard seed	PI-316220-65	56% and 44% hard seed
<u>Dalea oaxacana</u>		PI-316223-65	36
PI-315692-41	4% and 28% hard seed	PI-316228-65	20
<u>Desmanthes illinoensis</u>		PI-319469-66	80
BN-6978-57	48% and 36% hard seed	PI-364513-70	48% and 40% hard seed
BN-6978-66	16% and 68% hard seed	PI-364513-74	32% and 64% hard seed
<u>Desmanthes virgatus</u>		<u>Desmodium uncinatum</u>	
BN-12427-61	24% and 50% hard seed	PI-241430-63	12% and 20% hard seed
<u>Desmodium aparines</u>		PI-241431-64	80
BN-11699-60	20% and 12% hard seed	PI-319470-66	70
BN-11699-66	8% and 92% hard seed	PI-337653-68	20% and 4% hard seed
<u>Desmodium canum</u>		PI-355746-69	84% and 12% hard seed
BN-11689-61	32% and 4% hard seed	PI-364514-70	72% and 4% hard seed
BN-12047-64	56% and 4% hard seed	<u>Desmodium species</u>	
BN-12047-65	64% and 4% hard seed	PI-364790-78	60% and 24% hard seed
<u>Desmodium intortum</u>		BN-18751-68	70% and 28% hard seed
PI-188-58-49	4% and 40% hard seed	<u>Dianthus armeria</u>	
PI-244280-57	28% and 28% hard seed	BN-19689-75	78
PI-244280-68	94% and 4% hard seed	BN-19689-76	24
PI-266211-59	70% and 18% hard seed	BN-19689-70	99
PI-295877-65	57	<u>Dolichos lablab</u>	
PI-299089-66	96	BN-4136-48	7.5
PI-317894-65	60% and 12% hard seed	PI-189719-49	7% and 10% hard seed
PI-319468-66	48% and 36% hard seed	PI-246129-57	0
PI-338594-68	6	PI-311124-65	20
PI-355745-69	44% and 40% hard seed	PI-311155-65	0
PI-364511-70	100	PI-316569-65	40
<u>Desmodium perplexum</u>		PI-319473-66	100
BN-10420-58	88	PI-321080-66	30
<u>Desmodium rensonii</u>		PI-321081-66	100
BN-4164-45	0	PI-322532-66	100
<u>Desmodium rigidum</u>		PI-337655-68	60
BN-4519-51	8	PI-401553-75	80
BN-4519-68	32% and 60% hard seed	<u>Dolichos minimus</u>	
<u>Desmodium sandwicense</u>		BN-12430-62	54% and 2% hard seed
PI-275752-60	0	BN-12430-75	38% and 50% hard seed
PI-275753-60	0	BN-12433-65	28
PI-275754-60	8	<u>Dorycnium hirsutum</u>	
PI-275755-60	12	BN-9871-64	56
PI-275756-60	8	<u>Dorycnium intermedium</u>	
PI-297890-63	48% and 4% hard seed	PI-325313-67	20% and 64% hard seed
PI-315216-65	32% and 4% hard seed	<u>Dorycnium pentaphyllum</u> ssp. <u>herbaceum</u>	
PI-316216-65	40	PI-308013-67	64% and 12% hard seed

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Dorycnium rectum</u>		<u>Glycine javanica</u> ssp. <u>micrantha</u> var. <u>paniculata</u>	
PI-238291-60	56% and 8% hard seed	PI-304378-64	84
PI-274460-60	76		
<u>Dorycnopsis gerardii</u>		<u>Glycine max</u>	
PI-289650-62	8% and 80% hard seed	PI-315701-60	83
<u>Enchylaena tomentosa</u>		<u>Glycine ussuriensis</u>	
PI-279185-62	0	BN-10368-59	11% and 32% hard seed
<u>Enterolobium cyclocarpum</u>		PI-163453-66	40
PI-183904-48	0% and 100% hard seed	<u>Glycine species</u>	
<u>Eriosema floribundum</u>		BN-10821-62	26% and 10% hard seed
PI-322537-66	10% and 10% hard seed	<u>Hedysarum alpinum</u> var. <u>americanum</u>	
PI-322538-66	30	PI-377546-72	60
<u>Eriosema species</u>		<u>Hedysarum argenteum</u>	
PI-322539-66	70	PI-314088-65	28% and 4% hard seed
<u>Gaillardia pulchella</u>		<u>Hedysarum coronarium</u>	
BN-19639-69	28	BN-15610-64	0
BN-19639-73	14	PI-173372-48	32% and 16% hard seed
BN-19639-74	4	PI-173372-68	0% and 100% hard seed
<u>Galactia acapulcensis</u>		PI-283343-68	10% and 90% hard seed
PI-188883-66	4% and 96% hard seed	PI-283345-68	50% and 20% hard seed
<u>Galega officinalis</u>		PI-283347-68	0% and 60% hard seed
PI-198929-51	8% and 36% hard seed	PI-305507-64	80
PI-198929-53	28% and 32% hard seed	PI-430368-77	50% and 20% hard seed
PI-198929-57	12% and 8% hard seed	PI-430369-77	20% and 60% hard seed
PI-251825-60	36% and 16% hard seed	PI-430670-77	10% and 90% hard seed
PI-283238-63	40% and 24% hard seed	<u>Hedysarum hedysaroides</u>	
PI-283238-73	34% and 24% hard seed	PI-314089-65	16
PI-283238-74	8% and 4% hard seed	<u>Hedysarum humile</u>	
PI-296261-73	36% and 32% hard seed	PI-280258-61	10% and 60% hard seed
PI-296361-74	28% and 12% hard seed	PI-280258-64	48% and 52% hard seed
<u>Galium species</u>		PI-311408-65	44
PI-380864-72	0% and 100% hard seed	<u>Hedysarum species</u>	
<u>Gillenia trifoliata</u>		PI-383660-73	36% and 8% hard seed
BN-9879-	0	PI-383661-73	0
<u>Gleditsia triacanthos inermis</u>		<u>Helianthemum variabile</u>	
Commercial-78	5% and 55% hard seed	PI-292853-65	68
Commercial-65	15% and 65% hard seed	PI-292853-70	80
T-7168-51	10% and 10% hard seed	<u>Helianthemum canadense</u>	
<u>Glycine koidzumii</u>		Commercial-70	14
PI-300996-66	92		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Helianthus annuus</u>		<u>Hippocrepis salzmanni</u>	
BN-23261-73	2	PI-287837-64	44% and 16% hard seed
BN-23261-78	14	PI-287839-62	12% and 4% hard seed
		PI-287839-64	60% and 40% hard seed
<u>Helianthus maximiliani</u>		PI-302906-63	52% and 28% hard seed
BN-22560-73	44	PI-318999-62	40% and 48% hard seed
		PI-319000-63	36% and 32% hard seed
<u>Hemerocallis coreana</u>		<u>Hippocrepis scabra</u>	
PI-316602-73	16% and 48% hard seed	PI-319001-63	12% and 4% hard seed
PI-316602-74	30% and 60% hard seed		
<u>Hemerocallis species</u>		<u>Hippocrepis unisiliquosa</u>	
BN-22572-72	0% and 40% hard seed	PI-293399-64	60% and 40% hard seed
		PI-321406-69	52
<u>Heylandia latebrosa</u>		<u>Hosockia subpinnata</u>	
PI-189494-49	4% and 56% hard seed	PI-283469-63	16% and 50% hard seed
		PI-283470-68	20% and 28% hard seed
<u>Hibiscus syriacus</u>		PI-283471-68	32% and 20% hard seed
BN-18950-62	0	PI-283472-68	12% and 20% hard seed
BN-18950-68	0	PI-283473-68	8% and 44% hard seed
<u>Hippocrepis bicontortu</u>		<u>Hymenocarpus circinnatus</u>	
PI-292398-64	60% and 5% hard seed	PI-292400-64	30% and 70% hard seed
		PI-292401-64	20% and 80% hard seed
<u>Hippocrepis bourgaei</u>		<u>Indigofera endecaphylla</u>	
PI-287833-62	8% and 8% hard seed	BN-3712-47	0% and 50% hard seed
PI-287834-62	48	BN-4535-46	0% and 42% hard seed
<u>Hippocrepis commutata</u>		<u>Indigofera hirsuta</u>	
PI-287838-62	52% and 20% hard seed	BN-6257-49	0% and 64% hard seed
PI-289657-62	28% and 12% hard seed	BN-9057-56	0% and 44% hard seed
PI-311411-65	64	BN-9711-58	27% and 61% hard seed
PI-318995-62	12% and 8% hard seed	BN-9711-59	2% and 41% hard seed
PI-318996-62	4	BN-9711-62	44% and 40% hard seed
<u>Hippocrepis comosa</u>		<u>Indigofera lindheimeriana</u>	
PI-302903-63	8% and 4% hard seed	BN-4459-37	0% and 32% hard seed
<u>Hippocrepis glauca</u>		<u>Indigofera pilosa</u>	
PI-287835-62	24	BN-16501-67	8% and 19% hard seed
PI-287835-63	52% and 8% hard seed		
PI-287836-62	12% and 8% hard seed	<u>Indigofera pseudotinctoria</u>	
PI-311413-65	12	BN-8353-55	0
PI-311414-65	52	BN-10774-58	7% and 6% hard seed
PI-318997-62	52	BN-10774-61	18% and 8% hard seed
		BN-10774-62	1% and 2% hard seed
<u>Hippocrepis multisiliquosa</u>		BN-10774-63	36% and 4% hard seed
PI-302904-63	56		
PI-318998-63	8	<u>Indigofera subulata</u>	
<u>Hippocrepis salzmanni</u>		BN-16212-60	0% and 4% hard seed
PI-287837-62	24		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Indigofera species</u>		<u>Lathyrus articulatus</u>	
BN-6446-50	0% and 100% hard seed	PI-308017-66	92
<u>Kochia brevifolia</u>		<u>Lathyrus articulatus ssp. clymenum</u>	
PI-321389-66	0	PI-321024-67	3% and 97% hard seed
<u>Kochia georgei</u>		<u>Lathyrus cicera</u>	
PI-330673-67	0	PI-174236-64	100
<u>Kochia indica</u>		PI-221463-64	96
PI-330674-67	16	PI-221465-64	100
<u>Kochia prostrata</u>		PI-221467-64	96
PI-330708-67	0	PI-227308-75	44
PI-356819-70	0	PI-237639-64	90
PI-356820-70	0	PI-283498-61	90
PI-356821-70	0	PI-283498-64	95
PI-356822-70	0	PI-283499-61	85
PI-356824-70	0	PI-283499-64	95
PI-356825-70	0	PI-283500-61	80
<u>Laburnum anagyroides</u>		PI-283500-64	100
PI-202741-51	12% and 60% hard seed	PI-283501-61	100
<u>Lathyrus angulatus</u>		PI-283502-61	90
PI-283479-68	34% and 54% hard seed	PI-283504-61	90
<u>Lathyrus annuus</u>		PI-283504-64	100
PI-268322-75	44% and 52% hard seed	PI-283505-61	100
PI-308015-67	30% and 70% hard seed	PI-283506-61	80
<u>Lathyrus aphaca</u>		PI-283506-64	95
PI-175002-62	88	PI-283507-61	95
PI-283480-64	70% and 25% hard seed	PI-283508-61	90
PI-283481-64	84	PI-283508-64	90
PI-283484-75	48% and 48% hard seed	PI-283509-61	90
PI-283485-61	60	PI-283511-61	100
PI-283485-64	76% and 20% hard seed	PI-283512-61	100
PI-286527-62	98	PI-283513-61	100
PI-308016-66	68% and 32% hard seed	PI-283514-61	90
PI-369351-71	52% and 48% hard seed	PI-308018-66	100
<u>Lathyrus articulatus</u>		<u>Lathyrus clymenum</u>	
PI-283486-61	40	PI-283515-61	80
PI-283487-64	70	PI-283516-61	90
PI-283488-75	90	PI-283517-68	94
PI-283489-75	100	PI-283518-61	90
PI-283490-75	82	PI-283518-64	70
PI-283492-75#1	80	PI-283519-64	100
PI-283491-75	80	PI-292791-68	100
PI-283492-75#2	82	PI-308019-66	100
PI-283493-75	86	<u>Lathyrus hirsutus</u>	
PI-283494-75	84	PI-283520-69	0
PI-283495-68	90	PI-283521-65	52% and 16% hard seed
PI-283496-68	80	PI-308021-66	28% and 66% hard seed
		<u>Lathyrus inconspicuus</u>	
		PI-255372-61	76% and 22% hard seed
		PI-308022-66	40% and 20% hard seed
		PI-314259-67	28% and 68% hard seed

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Lathyrus japonicus</u> var. <u>globra</u>		<u>Lathyrus sativus</u>	
PI-315704-46	25% and 35% hard seed	PI-183498-64	100
PI-315704-73	60% and 40% hard seed	PI-193814-68	84
PI-315705-58	16% and 60% hard seed	PI-193816-68	100
		PI-195607-64	100
		PI-209789-64	96
<u>Lathyrus latifolius</u>		PI-212312-64	80
PI-315706-68	40% and 30% hard seed	PI-219923-64	90
		PI-220176-64	90
		PI--21466-64	100
<u>Lathyrus latifolius</u> var. <u>splendens</u>		PI-222203-64	92
PI-315707-49#1	4	PI-223269-64	85
PI-315707-49#2	8	PI-223270-64	100
PI-315707-63	14% and 80% hard seed	PI-227450-64	80
PI-315707-64	20% and 74% hard seed	PI-232923-64	100
PI-315707-65#1	20% and 70% hard seed	PI-239866-64	95
PI-315707-65#2	28% and 44% hard seed	PI-239867-64	90
PI-315707-66	64% and 8% hard seed	PI-255368-65	100
PI-315707-68	62% and 30% hard seed	PI-268478-60	20
PI-315707-69	40% and 28% hard seed	PI-268478-61	65
		PI-283546-61	50
		PI-283547-64	94
		PI-283548-61	70
<u>Lathyrus nissolia</u>		PI-283548-64	95
PI-175004-68	28% and 32% hard seed	PI-283549-64	100
PI-283522-68	60% and 40% hard seed	PI-283550-61	50
PI-308025-66	28% and 72% hard seed	PI-283550-64	86
		PI-283551-61	70
		PI-283551-64	85
<u>Lathyrus ochrus</u>		PI-283552-64	84
PI-283526-68	90	PI-283553-61	60
PI-283527-61	80	PI-283553-64	84
PI-283529-68	70% and 30% hard seed	PI-283554-68	86
PI-283530-61	70	PI-283555-61	60
PI-283531-61	80	PI-283555-64	88
PI-283533-64	100	PI-283556-64	95
PI-283535-61	90	PI-283557-61	80
PI-283538-61	90	PI-283557-64	96
PI-283540-68	90	PI-283558-68	94
PI-283544-64	70% and 30% hard seed	PI-283559-61	70
PI-292794-68	95	PI-283559-64	84
PI-308026-66	64% and 36% hard seed	PI-283560-61	80
		PI-283560-64	100
		PI-283561-61	80
<u>Lathyrus ornatus incanus</u>		PI-283561-64	92
PI-315708-48	8% and 72% hard seed	PI-283563-64	80
		PI-283564-61	65
		PI-283564-64	85
<u>Lathyrus pratensis</u>		PI-283565-64	95
PI-367822-70	10% and 60% hard seed	PI-283566-64	90
		PI-283567-64	95
		PI-283568-64	96
<u>Lathyrus pubescens</u>		PI-283569-64	92
PI-197856-65	30% and 70% hard seed	PI-283570-64	100
		PI-283571-61	70
		PI-283571-64	96
<u>Lathyrus sativus</u>		PI-283572-61	70
PI-163293-64	100	PI-283572-64	96
PI-170469-64	100	PI-283573-64	98
PI-170470-64	80	PI-283574-64	80
PI-170477-64	100	PI-283575-61	30
PI-172930-64	80	PI-283575-64	92
PI-173714-64	65	PI-283576-61	90
		PI-283576-64	94

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Lathyrus sativus</u>		<u>Lathyrus tuberosus</u>	
PI-283577-64	88	PI-315713-51	0
PI-283578-64	100	PI-315714-57	24
PI-283579-61	70		
PI-283579-64	88	<u>Lebeckia multiflora</u>	
PI-283580-61	50	PI-172280	0% and 8% hard seed
PI-283580-64	92		
PI-283581-61	60	<u>Lechea tenuifolia</u>	
PI-283581-64	92		
PI-283582-64	84	BN-18520-65	12
PI-283583-64	92		
PI-283584-61	80	<u>Leucaena latisiliqua</u>	
PI-283584-64	100		
PI-283585-61	50	PI-241167-57	0% and 100% hard seed
PI-283585-64	100	PI-274470-60	30% and 50% hard seed
PI-283586-64	88	PI-281770-61	10% and 5% hard seed
PI-283587-64	90	PI-282692-61	8% and 56% hard seed
PI-283588-64	90	PI-282396-61	8% and 84% hard seed
PI-283589-64	90	PI-316263-69	72% and 28% hard seed
PI-283590-64	76		
PI-283591-64	90	<u>Liatris pycnostachya</u>	
PI-283592-64	100		
PI-283593-64	100	Commercial	48
PI-283594-64	84		
PI-283595-64	96	<u>Liatris scariosa</u>	
PI-283596-64	80		
PI-283597-64	80	BN-22591-71	0
PI-283598-64	92	BN-23421-76	0
PI-283599-64	90		
PI-284119-61	100	<u>Lilian perenne</u>	
PI-286531-62	92		
PI-358600-70	100	BN-22575-72	0
PI-358601-70	100		
PI-368031-71	95	<u>Limonium latifolium</u>	
<u>Lathyrus sphaericus</u>		BN-22577-72	4
PI-292796-66	64% and 36% hard seed		
PI-308029-66	54% and 44% hard seed	<u>Lotus angustissimus</u>	
<u>Lathyrus sylvestris</u>		PI-368894-71	32% and 48% hard seed
PI-282562-65	12% and 86% hard seed	PI-368894-73	28% and 68% hard seed
PI-282562-67	50% and 50% hard seed	<u>Lotus arenarius</u>	
PI-282562-69	0% and 30% hard seed		
PI-282765-64	36% and 48% hard seed	PI-311425-62	14% and 82% hard seed
PI-282765-69	36% and 28% hard seed	PI-338643-68	32% and 40% hard seed
PI-290715-68	32% and 60% hard seed		
PI-290715-69	62% and 30% hard seed	<u>Lotus australis</u>	
PI-355714-69	66% and 24% hard seed		
<u>Lathyrus tingitanus</u>		PI-246731-57	48% and 16% hard seed
PI-283600-68	75% and 20% hard seed	<u>Lotus carmeli</u>	
PI-283601-68	68% and 32% hard seed		
PI-283602-68	90	PI-258396-58	16
PI-283603-68	96	PI-258396-60	4% and 92% hard seed
PI-292797-64	76% and 24% hard seed	<u>Lotus caucasicus</u>	
PI-306680-64	80		
PI-308031-66	86	PI-314090-65	38% and 34% hard seed
PI-346004-71	76% and 24% hard seed	PI-314090-68	36% and 56% hard seed
		PI-314090-69	32% and 48% hard seed
		PI-314090-70	24% and 64% hard seed
		PI-314535-67	28% and 38% hard seed

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Lotus caucasicus</u>		<u>Lotus corniculatus</u>	
PI-314535-68	32% and 57% hard seed	PI-322556-70	100
PI-314930-68	28% and 70% hard seed	PI-322556-71	88
PI-314930-69	24% and 76% hard seed	PI-383685-75	20% and 60% hard seed
PI-314930-70	28% and 64% hard seed	PI-383686-75	28% and 44% hard seed
PI-315449-67	40% and 36% hard seed	PI-383688-75	30% and 34% hard seed
PI-325369-70	20% and 72% hard seed	PI-383690-75	12% and 32% hard seed
PI-325369-71	52% and 16% hard seed	PI-421026-61A	51% and 1% hard seed
PI-325370-70	20% and 64% hard seed	PI-421026-61B	63% and 1% hard seed
PI-325373-70	38% and 50% hard seed		
PI-325373-71	70% and 24% hard seed	<u>Lotus corniculatus</u> var. <u>ciliarus</u>	
PI-325374-70	44% and 38% hard seed		
PI-325374-71	72% and 20% hard seed	PI-246732-52	6% and 6% hard seed
PI-325374-72	24% and 76% hard seed		
PI-325374-73	24% and 64% hard seed	<u>Lotus creticus</u>	
PI-325375-70	24% and 36% hard seed		
PI-325376-70	40% and 32% hard seed	PI-311429-63	44% and 54% hard seed
PI-325376-71	47% and 39% hard seed	PI-330676-67	68% and 32% hard seed
PI-325377-70	32% and 56% hard seed	PI-31142--64	52% and 4% hard seed
<u>Lotus conimbricensis</u>		<u>Lotus cytisoides</u>	
PI-238344-58	8% and 28% hard seed		
PI-238344-62	32% and 20% hard seed	PI-283626-61	52% and 32% hard seed
PI-283616-63	8% and 90% hard seed		
PI-308033-66	80	<u>Lotus decumbens</u>	
PI-311426-63	24% and 60% hard seed		
<u>Lotus conjugatus</u>		PI-311427-63	48% and 17% hard seed
		<u>Lotus edulis</u>	
PI-283617-61	68% and 8% hard seed		
PI-283617-63	44% and 56% hard seed	PI-244281-63	28% and 72% hard seed
PI-283617-71	42% and 56% hard seed	PI-283627-63	60% and 40% hard seed
PI-308059-67	24% and 60% hard seed	PI-368895-71	44% and 24% hard seed
<u>Lotus corniculatus</u>		PI-368896-71	80
PI-165799-68	10% and 80% hard seed	PI-368896-74	96
PI-196539-69	28% and 56% hard seed	PI-368897-71	80
PI-246730-70	52% and 16% hard seed	PI-368897-74	100
PI-246734-68	48% and 32% hard seed	PI-368898-71	76% and 20% hard seed
PI-246738-69	80	PI-368898-74	94
PI-260011-66 & 67	88		
PI-260012-67	64	<u>Lotus frondosus</u>	
PI-260013-67	60		
PI-283624-75	12% and 89% hard seed	PI-310412-67	36% and 48% hard seed
PI-285279-65	60% and 28% hard seed	PI-314091-65	8% and 92% hard seed
PI-285281-64	56% and 20% hard seed	PI-316272-67	70% and 24% hard seed
PI-285282-65	48% and 36% hard seed	PI-316272-68	14% and 82% hard seed
PI-285283-65	60% and 40% hard seed		
PI-286468-65	48% and 16% hard seed	<u>Lotus glinoides</u>	
PI-286469-65	12% and 72% hard seed		
PI-290375-69	52% and 20% hard seed	PI-246736-52	24% and 8% hard seed
PI-300014-67	64	PI-246736-68	92
PI-300015-68	52% and 16% hard seed		
PI-300015-69	28% and 58% hard seed	<u>Lotus grandiflorus</u>	
PI-300015-70	10% and 84% hard seed		
PI-305508-67	84	PI-368899-71	16
PI-315450-67	54% and 32% hard seed		
PI-315452-68	30% and 70% hard seed	<u>Lotus hispidus</u>	
PI-315452-69	46% and 52% hard seed		
PI-315455-70	36% and 52% hard seed	PI-258397-60	24% and 64% hard seed
PI-316268-68	84	PI-263242-58	12% and 6% hard seed
PI-316268-69	80	PI-283615-63	30% and 70% hard seed
		PI-308036-66	44% and 56% hard seed

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Lotus moroccanus</u>		<u>Lotus tenuis</u>	
PI-283628-68	66% and 10% hard seed	PI-229569-60	46% and 18% hard seed
PI-283629-63	36% and 48% hard seed	PI-238337-60	28
		PI-246737-53	0% and 4% hard seed
		PI-283631-66	0% and 100% hard seed
		PI-283632-67	56% and 16% hard seed
		PI-292409-64	60% and 20% hard seed
		PI-316270-67	76% and 12% hard seed
		PI-316270-68	32% and 32% hard seed
		PI-316270-69	68% and 24% hard seed
		PI-316271-67	52% and 20% hard seed
		PI-316275-67	64% and 36% hard seed
		PI-344045-70	32% and 48% hard seed
		PI-368909-74	84
<u>Lotus mearnsii</u>		<u>Lotus weilleri</u>	
PI-284761-65	76% and 24% hard seed	PI-186327-57	24% and 28% hard seed
PI-284761-66	60% and 40% hard seed	PI-368910-71	56% and 32% hard seed
<u>Lotus ornithopodioides</u>		<u>Lupinus albifrons</u> var. <u>douglassi</u>	
PI-186962-68	66% and 34% hard seed	PI-308042-66	95
PI-258398-60	0% and 92% hard seed		
PI-269853-65	40% and 44% hard seed	<u>Lupinus albus</u>	
PI-308038-66	54% and 46% hard seed	T-06959-71	100
PI-310413-66	74% and 26% hard seed	PI-289160-67	80
PI-368900-71	56% and 44% hard seed	PI-316276-65	80
PI-368901-71	56% and 44% hard seed	PI-316276-67	100
PI-368902-71	84	PI-316276-71	100
PI-368903-71	60% and 32% hard seed	PI-316278-67	95
<u>Lotus palustris</u>		PI-316279-67	92
PI-284674-61	80	PI-337089-68	100
PI-292408-64	56% and 12% hard seed	PI-338645-75	100
<u>Lotus parviflorus</u>		PI-368911-75	80
PI-308039-67	68% and 8% hard seed	PI-368912-75	80
<u>Lotus peduncalatus</u>		PI-368913-75	100
PI-48636-73	66% and 18% hard seed	PI-368914-75	100
PI-308037-69	44% and 36% hard seed	PI-368915-75	76
PI-316273-69	40% and 48% hard seed	<u>Lupinus angustifolius</u>	
PI-376219-71	80	PI-280627-61	90
PI-407472-65	16% and 82% hard seed	PI-280627-63	84
PI-407473-77	72% and 4% hard seed	PI-283638-67	80
<u>Lotus peregrinus</u>		PI-289163-67	95
PI-238335-58	4% and 96% hard seed	PI-289164-66	100
PI-238335-70	68% and 28% hard seed	PI-289164-67	90
PI-368904-71	76% and 16% hard seed	PI-316280-67	90
PI-368904-74	80	PI-316282-65	80
PI-368905-71	76% and 24% hard seed	PI-316281-67	88
PI-368905-74	44% and 52% hard seed	<u>Lupinus arboreus</u>	
<u>Lotus purshianus</u>		PI-393932-75	40% and 40% hard seed
PI-186326-62	72% and 20% hard seed	<u>Lupinus aridus</u>	
PI-338644-68	8% and 60% hard seed	PI-308041-66	90
<u>Lotus subpinnatus</u>			
PI-368906-71	36		
PI-368906-74	28% and 12% hard seed		
PI-368907-71	80		
PI-368908-71	72		
<u>Lotus tenuis</u>			
PI-229569-59	28% and 26% hard seed		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Lupinus elegans</u>		<u>Lychnis chalcedonica</u>	
BN-16302-59	10% and 20% hard seed	BN-22627-72	85
		BN-22627-75	100
<u>Lupinus hartwegii</u>		<u>Medicago aculeata</u>	
PI-289165-75	60	PI-287891-63	52% and 8% hard seed
<u>Lupinus hirsutus</u>		<u>Medicago arabica</u>	
PI-289167-64	60% and 4% hard seed	PI-227372-57	16% and 28% hard seed
PI-338647-70	100	PI-283639-61	52% and 4% hard seed
		PI-283639-63	64% and 32% hard seed
<u>Lupinus littoralis</u>		PI-368925-71	64% and 32% hard seed
BN-5397-48	20% and 16% hard seed	<u>Medicago arborea</u>	
<u>Lupinus luteus</u>		PI-368848-71	40% and 44% hard seed
PI-181588-48	0% and 40% hard seed	<u>Medicago aschersoniana</u>	
PI-289171-66	100	PI-199972-68	0% and 96% hard seed
PI-289173-70	100	<u>Medicago blanchiana</u>	
PI-303051-63	100	PI-368926-73	48% and 4% hard seed
PI-305501-64	80	<u>Medicago ciliaris</u>	
PI-305502-64	90	PI-198959-66	40% and 50% hard seed
PI-305503-64	80	PI-292415-64	30% and 64% hard seed
PI-316283-67	96	PI-292416-64	54% and 40% hard seed
PI-316284-67 #1	90	PI-368928-71	56% and 12% hard seed
PI-316284-67 #2	96	<u>Medicago coerulea</u>	
PI-316285-67	96	PI-28-640-64	8% and 60% hard seed
PI-316286-67	96	PI-283640-65	28% and 64% hard seed
PI-430549-79	90	<u>Medicago falcata</u>	
<u>Lupinus nanus</u>		PI-231731-59	72
PI-308051-67	84	<u>Medicago hemicycla</u>	
<u>Lupinus ornatus</u>		PI-315716-59	16% and 4% hard seed
PI-308052-66	80	<u>Medicago intertexta</u>	
<u>Lupinus palaestinus</u>		PI-220247-64	4% and 96% hard seed
PI-280629-63	20% and 70% hard seed	PI-308058-66	40% and 52% hard seed
<u>Lupinus pilosus</u>		<u>Medicago laciniata</u>	
PI-166960-59	50% and 30% hard seed	PI-244284-59	20
PI-292414-65	100	<u>Medicago littoralis</u>	
<u>Lupinus reticulatus</u>		PI-226647-65	90
PI-280628-61	60% and 40% hard seed	PI-255381-59	20% and 80% hard seed
PI-280628-63	28% and 72% hard seed	PI-316291-65	80
PI-280628-66	80	PI-316291-67	40% and 52% hard seed
<u>Lupinus varius</u>			
PI-197574-60	0% and 32% hard seed		
PI-197574-69	80		
<u>Lupinus species</u>			
PI-23230-74	80% and 20% hard seed		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Medicago lupulina</u>		<u>Medicago orbicularis</u>	
PI-189128-49	4	PI-311432-64	20% and 50% hard seed
PI-189128-62	100	PI-311433-64	15% and 82% hard seed
PI-197743-50	0% and 2% hard seed	PI-311435-64	6% and 83% hard seed
PI-197743-62	100	PI-311436-63	22% and 60% hard seed
PI-263243-62	40% and 44% hard seed	PI-311437-63	7% and 82% hard seed
PI-289310-66	100	PI-311438-64	46% and 38% hard seed
PI-302923-63	70% and 10% hard seed	PI-311439-63	14% and 80% hard seed
PI-302924-63	30% and 4% hard seed	PI-311440-63	7% and 83% hard seed
PI-308059-78	32% and 56% hard seed	PI-311441-64	4% and 82% hard seed
PI-311430-63	82% and 12% hard seed	PI-311442-64	19% and 79% hard seed
PI-311431-64	30% and 10% hard seed	PI-311443-64	13% and 62% hard seed
PI-383697-76	32% and 68% hard seed	PI-311444-64	13% and 84% hard seed
<u>Medicago minima</u>		PI-311445-64	8% and 84% hard seed
PI-227032-65	56% and 36% hard seed	PI-311446-64	8% and 86% hard seed
PI-255382-61	20% and 80% hard seed	PI-314540-67	80% and 8% hard seed
PI-287890-63	34% and 51% hard seed	PI-346008-71	28
PI-292418-64	52% and 6% hard seed	PI-368929-71	44% and 16% hard seed
<u>Medicago murex</u>		PI-368930-71	20% and 52% hard seed
PI-227025-65	94% and 4% hard seed	PI-368931-71	44% and 24% hard seed
PI-253448-61	84	PI-368932-71	16% and 20% hard seed
PI-290377-64	80% and 14% hard seed	PI-368933-71	24% and 4% hard seed
<u>Medicago muricata</u>		PI-383700-73	80
PI-244282-57	12	PI-383700-76	30% and 70% hard seed
<u>Medicago noeana</u>		<u>Medicago polymorpha</u>	
PI-308061-66	30% and 70% hard seed	PI-163369-66	20% and 80% hard seed
<u>Medicago obscura</u>		<u>Medicago polymorpha</u> var. <u>vulgaris</u>	
T-6692-60	1	PI-226469-65	0% and 92% hard seed
<u>Medicago orbicularis</u>		PI-229766-65	68% and 32% hard seed
PI-197349-62	50% and 50% hard seed	PI-244312-60	24
PI-233248-58	16% and 24% hard seed	PI-244314-52	20% and 12% hard seed
PI--27028-61	16% and 16% hard seed	PI-246740-60	20
PI-227029-57	48% and 12% hard seed	PI-287878-62	26% and 66% hard seed
PI-227029-61	20% and 8% hard seed	PI-287879-62	32% and 40% hard seed
PI-227030-65	20% and 60% hard seed	PI-287880-63	75% and 19% hard seed
PI-244316-57	32% and 8% hard seed	PI-287881-63	42% and 53% hard seed
PI-249829-62	16% and 20% hard seed	PI-287882-64	26% and 71% hard seed
PI-283641-66	40% and 56% hard seed	PI-292424-66	20% and 76% hard seed
PI-283643-66	18% and 80% hard seed	PI-292426-66	24% and 76% hard seed
PI-283644-66	0% and 100% hard seed	PI-292429-66	52% and 36% hard seed
PI-283645-66	0% and 100% hard seed	<u>Medicago polymorpha</u> var. <u>vulgaris</u> f. <u>tuberculata</u>	
PI-283646-66	16% and 52% hard seed	PI-186329-66	32% and 68% hard seed
PI-283647-66	20% and 72% hard seed	<u>Medicago rigidula</u>	
PI-287870-63	11% and 85% hard seed	PI-233252-48	8
PI-287874-63	14% and 72% hard seed	PI-290378-64	48% and 48% hard seed
PI-287876-63	15% and 72% hard seed	PI-308055-66	56% and 36% hard seed
PI-289311-64	62% and 26% hard seed	PI-368960-71	72% and 28% hard seed
PI-292419-65	16% and 78% hard seed	<u>Medicago rotata</u>	
PI-292420-65	18% and 74% hard seed	PI-292430-64	24% and 76% hard seed
PI-292421-65	18% and 76% hard seed	PI-202431-64	12% and 88% hard seed
PI-292422-65 #1	72% and 24% hard seed	PI-368961-71	40% and 32% hard seed
PI-292422-65 #2	16% and 72% hard seed		

Name, PI Number, and Seed Year	Percent Germination	Name, PI Number, and Seed Year	Percent Germination
<u>Medicago rugosa</u>		<u>Medicago scutellata</u>	
PI-368962-71	48% and 16% hard seed	PI-255383-61	16% and 28% hard seed
<u>Medicago sativa</u>		PI-255383-62	16
PI-172188-48	12	PI-283659-63	4% and 72% hard seed
PI-172189-48	22	PI-284122-65	0% and 90% hard seed
PI-172189-60	76% and 16% hard seed	PI-284122-65	0% and 50% hard seed
PI-172190-48	20	PI-290379-65	8% and 24% hard seed
PI-172190-60	44% and 4% hard seed	PI-292432-65	0% and 75% hard seed
PI-173728-55	12	PI-292433-65	0% and 100% hard seed
PI-183653-48	16	PI-368963-71	60% and 15% hard seed
PI-184803-48	0	PI-368966-71	40% and 10% hard seed
PI-185481-49	0% and 4% hard seed	PI-368967-71	40% and 10% hard seed
PI-198962-51	8% and 8% hard seed	<u>Medicago solierolii</u>	
PI-198963-51	12% and 4% hard seed	PI-258399-69	10% and 90% hard seed
PI-244317-57	76% and 12% hard seed	PI-368969-71	40% and 10% hard seed
PI-246742-60	56% and 8% hard seed	<u>Medicago tianschanica</u>	
PI-196235-55	16	PI-283660-69	94
PI-206572-58	32% and 8% hard seed	<u>Medicago tornata</u>	
PI-207495-55	20	PI-197346-61	60% and 10% hard seed
PI-212104-55	28	PI-197350-61	90
PI-212798-55	0	PI-197860-68	40% and 60% hard seed
PI-222735-55	48% and 8% hard seed	PI-308062-66	60% and 40% hard seed
PI-223387-55	16	PI-368970-71	88
PI-268408-60	72	<u>Medicago tornata var.</u>	
PI-268408-62	72	<u>negulosa</u>	
PI-269168-61	44% and 29% hard seed	PI-368971-71	72
PI-289661-62	62% and 36% hard seed	<u>Medicago tornata var.</u>	
PI-289662-62	36% and 60% hard seed	<u>shepardii</u>	
PI-314384-65	50	PI-368972-71	12% and 4% hard seed
PI-369353-64	18% and 46% hard seed	<u>Medicago tribuloides</u>	
T-07007-48	80	BN-16303-59	30
T-07008-49	62	PI-283661-69	10% and 8% hard seed
T-07009-49	41	PI-283662-61	68
T-07009-50	32	PI-284123-64	60% and 36% hard seed
T-07010-50	8	PI-287888-62	20% and 4% hard seed
T-07011-50	24	<u>Melilotus alba</u>	
T-07012-50	20	BN-19820-70	46% and 6% hard seed
T-07014-57	40	BN-5872-48	0% and 2% hard seed
T-07016-59	31	BN-6986-68	76% and 12% hard seed
T-07017-62	20	BN-8390-51	16
T-07018-62	56	BN-9025-68	68% and 16% hard seed
T-07020-68	64% and 2% hard seed	T-07023-78	26% and 66% hard seed
T-07021-71	60% and 16% hard seed	T-07024-65	16
BN-7645-56	48% and 2% hard seed	T-07024-78	24% and 50% hard seed
T-07019-62	96	T-07023-65	22
BN-22929-72	42% and 40% hard seed	PI-383707-78	36% and 52% hard seed
<u>Medicago sativa</u> X <u>falcata</u>		<u>Melilotus alba annua</u>	
BN-8352-56	24% and 8% hard seed	BN-7055-50	20% and 13% hard seed
BN-8464-56	8		
BN-8351-55	34% and 10% hard seed		
BN-8352-55	32% and 14% hard seed		
BN-16506-57	12% and 12% hard seed		
PI-247006-57	16% and 50% hard seed		
<u>Medicago scutellata</u>			
PI-189569-49	34		
PI-189570-49	6		
PI-189571-49	30% and 15% hard seed		
PI-197356-62	50% and 50% hard seed		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Melilotus dentata X alba</u>		<u>Pinus aristata</u>	
BN-12421-61	72% and 7% hard seed	BN-21629-70	0
<u>Melilotus officinalis</u>		<u>Pinus elliotti densa</u>	
BN-5873-48	7	BN-10739-59	24
BN-5873-69	56% and 4% hard seed		
BN-6987-50	4	<u>Pinus griffithi</u>	
BN-7023-50	0% and 86% hard seed	1968 seed	0
		1969 seed	2
<u>Melilotus viridula</u>		<u>Pinus nigra</u>	
BN-4078-58	26% and 4% hard seed	1970 seed	80
BN-4078-68	44% and 32% hard seed		
<u>Nepeta mussina</u>		<u>Pinus sylvestris</u>	
BN-22578-72	32% and 28% hard seed	1970 seed	82
<u>Oenothera biennis</u>		<u>Pinus taeda</u>	
T-02069-74	4	1969 seed	26
<u>Oenothera lamarkiana</u>		<u>Pinus thunbergii</u>	
T-02070-72	78	1970 seed	32
BN-22628-73	84		
<u>Onobrychis vicifolia</u>		<u>Pinus virginiana</u>	
BN-13551-62	0% and 92% hard seed	1969 seed	82
BN-22961-73	80		
<u>Onobrychis species</u>		<u>Pisum sativum</u>	
BN-15448-63	0	List #62	100
<u>Penstemon digitalis</u>		<u>Polygonum pensylvanicum</u>	
BN-22559-74	0	BN-7289-57	0% and 58% hard seed
BN-22599-77	14	<u>Pueraria thunbergiana</u>	
<u>Phaseolus lathyroides</u>		BN-22974-73	50
BN-4924-48	30	<u>Ratibida pinnata</u>	
BN-14715-62	40	BN-22594-72	4
BN-14716-62	68	BN-22594-74	64
BN-17089-65	44% and 56% hard seed	BN-22594-75	80
PI-153704-47	18% and 8% hard seed		
PI-276182-60	36	<u>Rhynchosia minima</u>	
PI-276182-62	82	BN-19052-68	40% and 40% hard seed
PI-276182-64	35% and 61% hard seed		
PI-276183-63	80	<u>Rhynchosia tomentosa</u>	
PI-276185-62	88	BN-8467-56	60
PI-280130-61	76% and 16% hard seed		
PI-280130-64	18% and 72% hard seed	<u>Robinia fertilis</u>	
PI-315737-48	24% and 4% hard seed	T-02669-68 #1	43% and 4% hard seed
PI-316464-65	20	T-02669-71 #1	68% and 8% hard seed
PI-322591-66	80	T-02669-68 #2	52% and 20% hard seed
PI-322592-66	80	T-02669-70	70% and 10% hard seed
<u>Phaseolus lunatus</u>			
PI-186340-54	10		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number and Seed Year</u>	<u>Percent Germination</u>
<u>Robinia fertilis</u>		<u>Salvia verticillata</u>	
T-02669-71 #2	64% and 26% hard seed	PI-380900-78	20% and 80% hard seed
<u>Robinia neomexicana</u>		<u>Sesbania acutata</u>	
BN-2000-38	0% and 44% hard seed	BN-14717-62	32% and 62% hard seed
<u>Robinia pseudoacacia</u>		<u>Sesbania emerus</u>	
BN-2001-37	4% and 4% hard seed	BN-4935-66	20% and 80% hard seed
BN-2002-37	0% and 20% hard seed		
BN-2870-41	4% and 14% hard seed	<u>Silphium integrifolium</u>	
BN-6747-50	22% and 68% hard seed		
BN-6842-50	0	BN-22596-71	4
BN-7080-50	10% and 4% hard seed	BN-22596-76	10
BN-15914-58	52% and 25% hard seed		
BN-15914-60	18% and 54% hard seed	<u>Stizolobium deeringianum</u>	
BN-15916-58	53% and 22% hard seed		
BN-18272-67	8% and 76% hard seed	BN-6687-64	50
<u>Robinia slatinii</u>		<u>Syringa amurensis japonica</u>	
BN-2003-39	32% and 44% hard seed	1967 seed	0
<u>Robinia viscosa</u>		<u>Syringa villosa</u>	
BN-10889-59	32% and 68% hard seed	1966 seed	0
<u>Rudbeckia hirta</u>		<u>Syringa vulgaris</u>	
1970 seed	80	1973 seed	4
1978 seed	84		
BN-17973-66	84	<u>Tagetes erecta</u>	
BN-17973-68	100		
BN-17973-75	100	PI-350689-71	60
BN-17973-76	100	PI-350690-71	38
		PI-350691-71	48
<u>Rudbeckia nitida</u>		<u>Tagetes lemoni</u>	
BN-22739-75	0		
		PI-390235-64	16
<u>Rudbeckia purpurea</u>		<u>Tagetes lucida</u>	
BN-22603-72 #1	56		
BN-22603-72 #2	10	PI-390236-74	36
<u>Rudbeckia sullinanti</u>		<u>Tagetes minuta</u>	
BN-22748-74	80		
BN-22748-75	28	PI-350694-71	80
BN-22748-76	84		
<u>Salvia hispanica</u>		<u>Tagetes patula</u>	
BN-19653-70	100		
		PI-350695-71	76
<u>Salvia pitcheri</u>		PI-350697-71	52
		PI-350698-71	70
		PI-372360-73	70
		<u>Teramnus labialis</u>	
BN-22595-72	42		
BN-22595-73	68	T-07100-62	40% and 50% hard seed
BN-22595-74	70	PI-406170-78	28% and 56% hard seed
BN-22595-75	82		
BN-22595-76	81		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Teramnus repens</u>		<u>Trifolium hybridum</u>	
PI-406171-78	4% and 96% hard seed	BN-10952-70	16% and 60% hard seed
		BN-20918-75	60% and 32% hard seed
<u>Tetragonolobus purpurens</u>		<u>Trifolium incarnatum</u>	
BN-20902-74	92	BN-9847-58	1
<u>Trifolium alexandrium</u>		BN-12422-61	73
BN-11687-60	40	BN-20919-74	16% and 84% hard seed
<u>Trifolium ambiguum</u>		<u>Trifolium isthmocarpum</u>	
T-02116-58	6% and 6% hard seed	BN-10878-55	20% and 48% hard seed
<u>Trifolium angustifolium</u>		<u>Trifolium lagopus</u>	
BN-11354-62	4	BN-10926-59	8% and 28% hard seed
BN-20905-64	40% and 40% hard seed	BN-10926-69	30% and 62% hard seed
<u>Trifolium arvense</u>		<u>Trifolium lappocum</u>	
BN-20906-74	6% and 92% hard seed	BN-20920-74	1% and 62% hard seed
BN-6658-57	26% and 18% hard seed	<u>Trifolium leucanthum</u>	
<u>Trifolium balanse</u>		BN-20921-74	28% and 64% hard seed
BN-10945-70	20% and 32% hard seed	<u>Trifolium ligusticum</u>	
<u>Trifolium cherleri</u>		BN-20922-74	40% and 60% hard seed
BN-20910-76	18% and 72% hard seed	<u>Trifolium nigrescens</u>	
<u>Trifolium clypeatum</u>		BN-10923-59	12% and 88% hard seed
BN-20911-74	2% and 94% hard seed	BN-11402-65	20% and 68% hard seed
<u>Trifolium diffusum</u>		BN-14721-62	12% and 43% hard seed
BN-9539-66	28% and 58% hard seed	<u>Trifolium obscurum</u>	
BN-16306-60	4	BN-20928-74	28% and 68% hard seed
<u>Trifolium echinatum</u>		<u>Trifolium obscurum ssp. aequidentatum</u>	
BN-20913-74	4% and 72% hard seed	BN-20929-74	24% and 70% hard seed
<u>Trifolium fragiferum</u>		<u>Trifolium occidentale</u>	
BN-4349-69	48% and 44% hard seed	BN-20930-74	60% and 40% hard seed
BN-5026-66	4% and 92% hard seed	BN-20964-67	24% and 8% hard seed
T-04900-69	62% and 32% hard seed	BN-20964-74	52% and 48% hard seed
<u>Trifolium glomeratum</u>		<u>Trifolium pratense</u>	
BN-20915-74	0% and 100% hard seed	BN-6988-50	12
<u>Trifolium hirtum</u>		BN-9154-54	18% and 2% hard seed
BN-9146-56	2% and 24% hard seed	BN-9154-57	18% and 8% hard seed
BN-1946-73	42% and 16% hard seed	BN-9154-58	26
BN-9873-58	4% and 46% hard seed	BN-9155-57	4% and 4% hard seed
BN-17329-60	32% and 28% hard seed	BN-9212-57	68% and 5% hard seed
BN-20917-74	32% and 36% hard seed	BN-19648-69	80
		1960 seed	20

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Trifolium purpureum</u>		<u>Vicia benghalensis</u>	
BN-11568-61	40% and 12% hard seed	BN-9372-61	96
		BN-9372-75	100
<u>Trifolium repens</u>		BN-13607-66	28
BN-5428-69	70% and 28% hard seed	BN-17960-66	90
BN-7056-50	16% and 8% hard seed	BN-20962-74	92
BN-9030-56	12% and 14% hard seed	<u>Vicia biennis</u>	
BN-19646-67	84	BN-20958-74	52% and 48% hard seed
BN-14613-62	39% and 44% hard seed	<u>Vicia cracca</u>	
1961 seed	69% and 11% hard seed		
1962 seed	78% and 12% hard seed		
<u>Trifolium repens latum</u>		T-07109-67	50% and 30% hard seed
BN-6989-50	6% and 11% hard seed	<u>Vicia dasycarpa</u>	
BN-6989-51	13% and 31% hard seed	BN-16316-64	96
BN-6989-57	20% and 18% hard seed	BN-19253-70	86
<u>Trifolium resupinatum</u>		BN-19254-70	72% and 20% hard seed
BN-10936-60	8% and 82% hard seed	<u>Vicia disperma</u>	
<u>Trifolium species</u>		BN-20960-74	52% and 48% hard seed
BN-10941-60	36% and 56% hard seed	<u>Vicia eriocarpa</u>	
<u>Trigonella polycerata</u>		BN-19190-70	86
BN-8654-65	16% and 68% hard seed	<u>Vicia ervillia</u>	
BN-20957-74	72% and 4% hard seed	BN-17720-67	100
<u>Vernonia missurica</u>		<u>Vicia exigua</u>	
BN-22647-73	0	BN-21862-72	32% and 48% hard seed
<u>Vernonia noveboracensis</u>		<u>Vicia grandiflora</u>	
BN-23265-73	0	BN-4514-62	60% and 20% hard seed
<u>Veronica incana</u>		BN-4514-75	68% and 8% hard seed
BN-10888-62	46	BN-8662-56	4
<u>Veronica teucrium</u>		BN-13535-57	0
BN-19467-73	88	BN-13535-62	80
<u>Vicia americana</u>		BN-13535-70	80
BN-23263-73	76% and 16% hard seed	BN-13535-75	100
<u>Vicia amurensis</u>		BN-20963-74	80
BN-18953-71	0% and 100% hard seed	<u>Vicia grandiflora var. kitaibeliana</u>	
<u>Vicia angustifolia</u>		BN-20964-74	80
BN-4159-61	0	<u>Vicia hirsuta</u>	
BN-19685-68	5% and 40% hard seed	BN-6078-49	0
<u>Vicia articulata</u>		BN-7051-40	0
BN-20970-74	64% and 36% hard seed	BN-20965-74	38% and 62% hard seed
		<u>Vicia hybrida</u>	
		BN-19650-69	92
		BN-19650-70	100
		BN-19650-71	84

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Vicia hybrida</u>		<u>Vicia noeana</u>	
BN-20966-74	30% and 70% hard seed	BN-19338-71 BN-19337-71	35% and 65% hard seed 80
<u>Vicia incisaeformis</u>		<u>Vicia pannomica</u>	
BN-19193-70	28% and 72% hard seed	BN-22956-68	92
<u>Vicia lathroides</u>		<u>Vicia peregrina</u>	
BN-20969-74	90	BN-19341-71 BN-20976-74	8% and 92% hard seed 84
BN-16458-67	28% and 72% hard seed	<u>Vicia pilosa</u>	
<u>Vicia leavenworthii</u>		BN-19199-70	52% and 48% hard seed
BN-4001-47	0	<u>Vicia pisiformis</u>	
BN-4001-48	4	T-07111-67 T-07111-73 T-07111-74	40% and 25% hard seed 10% and 80% hard seed 15% and 75% hard seed
<u>Vicia litinovii</u>		<u>Vicia sativa</u>	
BN-18960-69	60% and 8% hard seed	BN-14522-62 BN-14524-62 BN-14524-66 BN-18081-66 BN-19342-71 BN-19343-71	84 72 84 88 80 74% and 26% hard seed
<u>Vicia lutea</u>		<u>Vicia sativa nigra</u>	
BN-16308-62	58% and 4% hard seed	BN-20981-74	100
BN-16308-66	16	<u>Vicia tenuifolia</u>	
BN-18576-66	44	BN-15481-64	46% and 12% hard seed
<u>Vicia lutea</u> ssp. <u>laevigata</u>		<u>Vicia tetrosperma</u>	
BN-20971-74	60% and 40% hard seed	BN-4401-62	60% and 12% hard seed
<u>Vicia macrocarpa</u>		<u>Vicia unijuga</u>	
BN-19194-70	90	T-07117-67	0
BN-20980-74	90	<u>Vicia variegata</u>	
<u>Vicia meyeri</u>		BN-18966-72	8% and 92% hard seed
BN-19196-70	40% and 50% hard seed	<u>Vicia villosa</u>	
<u>Vicia minutiflora</u>		BN-19331-70 BN-17699-66 BN-19686-69 BN-20986-74 BN-21784-75	80 53 62 94 80
BN-20421-72	16% and 24% hard seed	<u>Vicia villosa</u> f. <u>albiflora</u>	
BN-20425-72	38% and 42% hard seed	BN-19673-70	40
<u>Vicia monantha</u>			
BN-20972-74	84		
<u>Vicia monantha</u> ssp. <u>triflora</u>			
BN-20973-74	16% and 56% hard seed		
<u>Vicia narbonensis</u> var. <u>serratifolia</u>			
BN-20974-74	55% and 40% hard seed		
<u>Vicia neglecta</u>			
BN-19197-70	96		

<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>	<u>Name, PI Number, and Seed Year</u>	<u>Percent Germination</u>
<u>Vicia villosa</u> var. <u>eriocarpa</u>		<u>Vigna unguiculata</u> ssp. <u>cyindrica</u>	
BN-20984-74	92	PI-286438-62	100
		PI-286438-63	90
<u>Vicia villosa</u> var. <u>varia</u>		PI-263253-58	34% and 6% hard seed
BN-20985-74	54% and 40% hard seed	PI-180494-62	100
<u>Vicia</u> species		<u>Vigna unguiculata</u> ssp. <u>sesquipedalis</u>	
BN-19687-69	28% and 25% hard seed	PI-215659-62	50
BN-19687-71	16% and 84% hard seed	PI-221534-62	80
BN-21865-72	24% and 52% hard seed		
BN-21878-72	84	<u>Vigna unguiculata</u> ssp. <u>unguiculata</u>	
BN-21898-74	8% and 92% hard seed		
BN-21899-72	92	BN-5683-67&68	95
<u>Vigna aconitifolia</u>		PI-186359-48	0
BN-6673-49	54	PI-186359-50	0
PI-372355-71	88	PI-186360-58	75
		PI-291139-62	70
<u>Vigna decipiens</u>		PI-291139-65	60
PI-365091-70	20% and 48% hard seed	PI-291140-62	90
		PI-291140-65	70
<u>Vigna heterophylla</u>		PI-291141-62	100
PI-199374	36% and 36% hard seed	PI-291142-62	90
		PI-291143-62	90
		PI-315749-48	0
		PI-315750-50	5
<u>Vigna luteola</u>		<u>Vigna</u> species	
PI-175009-50	42% and 2% hard seed	BN-10834-65	40
PI-280131-61	20% and 72% hard seed	PI-199375-78	16% and 72% hard seed
PI-280131-63	44% and 52% hard seed		
PI-322343-73	84	<u>Voandzeia subterranea</u>	
PI-355920-69	84		
PI-355920-74	72% and 24% hard seed	BN-4129	80
PI-365092-70	44% and 52% hard seed		
PI-365093-70	64% and 36% hard seed	<u>Zinnia grandiflora</u>	
<u>Vigna radiata</u>		BN-22938-68	34
BN-9773-58	85		
BN-16169-62	90		
<u>Vigna repens</u>			
BN-14675-62	74% and 12% hard seed		
BN-14722-62	64% and 2% hard seed		
BN-14723-62	38% and 22% hard seed		
BN-14724-62	64% and 2% hard seed		
BN-14725-62	80% and 4% hard seed		
BN-14725-65	56% and 2% hard seed		
<u>Vigna unguiculata</u>			
PI-372356-71	80		
<u>Vigna unguiculata</u> ssp. <u>cyindrica</u>			
PI-200244-56	0		
PI-250238-62	40		

Accessions Planted - 1979

Two-hundred-ninety-three different accessions were planted on the center during 1979. The plantings were made to:

1. Increase small amounts of available seed
2. Check identity
3. Reproduce aging seed in order to maintain viable seed in storage
4. Note plant performance

Grasses

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
229529	<u>Alopecurus arundinaceus</u>	Iran
380664	<u>Alopecurus arundinaceus</u>	Iran
T-06641	<u>Alopecurus geniculatus</u>	Denmark
T-06642	<u>Alopecurus geniculatus</u>	Denmark
380670	<u>Alopecurus pratensis</u>	Iran
380671	<u>Alopecurus pratensis</u>	Iran
380672	<u>Alopecurus pratensis</u>	Iran
380673	<u>Alopecurus pratensis</u>	Iran
383586	<u>Alopecurus pratensis</u>	Turkey
T-06643	<u>Alopecurus pratensis</u>	France
422449	<u>Ammophila arenaria</u>	Germany
T-06651	<u>Ammophila arenaria</u>	Denmark
T-06650	<u>Ammophila arenaria</u>	Norway
T-07122	<u>Ammophila arenaria</u> x <u>baltica</u>	Denmark
Planted for identification	<u>Brachypodium sylvaticum</u>	

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
383616	<u>Bromus erectus</u>	Turkey
T-06687	<u>Bromus hordeaceus</u>	Norway
T-06688	<u>Bromus hordeaceus</u>	Denmark
T-06689	<u>Bromus hordeaceus</u>	Denmark
T-06690	<u>Bromus hordeaceus</u>	Denmark
T-06691	<u>Bromus hordeaceus</u>	Denmark
T-07131	<u>Bromus ramosus</u> ssp. <u>benekeni</u>	Denmark
T-07132	<u>Bromus ramosus</u> ssp. <u>ramosus</u>	Denmark
T-07133	<u>Bromus ramosus</u> ssp. <u>ramosus</u>	Denmark
T-06692	<u>Bromus secalinsis</u>	Denmark
T-07134	<u>Bromus secalinsis</u> var. <u>velutinus</u>	Denmark
380770	<u>Bromus tomentellus</u>	Iran
380774	<u>Bromus tomentellus</u>	Iran
380775	<u>Bromus tomentellus</u>	Iran
383619	<u>Bromus tomentellus</u>	Turkey
383620	<u>Bromus tomentellus</u>	Turkey
383621	<u>Bromus tomentellus</u>	Turkey
384811	<u>Bromus tomentellus</u>	Iran
384816	<u>Bromus tomentellus</u>	Iran
384817	<u>Bromus tomentellus</u>	Iran
384818	<u>Bromus tomentellus</u>	Iran
384820	<u>Bromus tomentellus</u>	Iran
384821	<u>Bromus tomentellus</u>	Iran
384822	<u>Bromus tomentellus</u>	Iran
384828	<u>Bromus tomentellus</u>	Iran

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
380772	<u>Bromus tomentellus</u>	Iran
314647	<u>Bromus species</u>	USSR
286474	<u>Calamagrostis arundinacea</u>	Japan
325240	<u>Calamagrostis arundinacea</u>	USSR
345969	<u>Calamagrostis canescens</u>	Norway
T-06697	<u>Calamagrostis neglecta</u>	Norway
346967	<u>Dactylis marina</u>	Wales
346968	<u>Dactylis marina</u>	Portugal
346969	<u>Dactylis marina</u>	Wales
346970	<u>Dactylis marina</u>	Portugal
20598	<u>Dactylis marina</u>	Portugal
368881	<u>Dactylis glomerata</u>	Portugal
T-06777	<u>Deschampsia caespitosa</u>	Norway
T-07150	<u>Deschampsia caespitosa</u> ssp. <u>behringensis</u>	Canada
406167	<u>Digitaria mombasana</u>	Kenya
345978	<u>Elymus arenarius</u>	Norway
325315	<u>Elymus sibiricus</u>	USSR
326267	<u>Elymus sibiricus</u>	USSR
369236	<u>Elymus sibiricus</u>	USSR
378053	<u>Elymus species</u>	Argentina
331392	<u>Hyparrhenia anthistirioides</u>	Ethiopia
273928	<u>Hyparrhenia hirta</u>	Ethiopia
409034	<u>Panicum maximum</u>	Brazil
300082	<u>Pennisetum clandestinum</u>	Ethiopia

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
409103	<u>Pennisetum clandestinum</u>	Ethiopia
410296	<u>Pennisetum clandestinum</u>	Ethiopia
410298	<u>Pennisetum clandestinum</u>	Ethiopia
410299	<u>Pennisetum clandestinum</u>	Ethiopia
410300	<u>Pennisetum clandestinum</u>	Ethiopia
410301	<u>Pennisetum clandestinum</u>	Ethiopia
410302	<u>Pennisetum clandestinum</u>	Ethiopia
410303	<u>Pennisetum clandestinum</u>	Ethiopia
410304	<u>Pennisetum clandestinum</u>	Ethiopia

Legumes and Others

T-06625	<u>Achillea millefolium</u>	Denmark
T-06626	<u>Achillea millefolium</u>	Denmark
T-06627	<u>Achillea millefolium</u>	Denmark
T-06628	<u>Achillea millefolium</u>	Denmark
T-06629	<u>Achillea millefolium</u>	Greenland
T-06630	<u>Achillea ptarmica</u>	Denmark
T-06631	<u>Achillea ptarmica</u>	Norway
383527	<u>Achillea species</u>	Turkey
383528	<u>Achillea species</u>	Turkey
	<u>Amphicarpa bracteata</u>	Dr. Oakes
T-06664	<u>Armeria maritima</u>	Norway
T-06665	<u>Armeria maritima</u>	Norway
T-06666	<u>Armeria maritima</u>	Greenland
T-07124	<u>Armeria maritima ssp. sibirica</u>	Greenland

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
T-06672	<u>Artemisia vulgaris</u>	Denmark
T-06673	<u>Artemisia</u> species	Korea
421278	<u>Asclepias tuberosa</u>	Nebraska
202149	<u>Astragalus</u> species	Argentina
383604	<u>Astragalus</u> species	Turkey
415852	<u>Atriplex canescens</u>	S. Africa
T-06680	<u>Atriplex hortensis</u>	Denmark
T-07126	<u>Atriplex hortensis</u> var. <u>rubra</u>	Denmark
T-07127	<u>Atriplex littoralis</u>	Norway
T-06681	<u>Atriplex patula</u>	Denmark
T-06682	<u>Atriplex patula</u>	Denmark
T-06683	<u>Atriplex patula</u>	Denmark
T-07128	<u>Atriplex patula</u> var. <u>erecta</u>	Denmark
T-07129	<u>Atriplex sabulosa</u>	Norway
368852	<u>Atriplex semibaccata</u>	Chile
368853	<u>Atriplex semibaccata</u>	Chile
330671	<u>Atriplex</u> species	Venezuela
365646	<u>Biserrula pelecinus</u>	Spain
T-06699	<u>Calendula officinalis</u>	Spain
T-06700	<u>Calopogonium caeruleum</u>	Malasia
T-07137	<u>Campanula alliariifolia</u>	Belgium
T-06701	<u>Campanula rotundifolia</u>	Denmark
T-06702	<u>Campanula rotundifolia</u>	Denmark
T-06703	<u>Campanula rotundifolia</u>	Denmark

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
T-06704	<u>Campanula rotundifolia</u>	Denmark
T-06705	<u>Campanula rotundifolia</u>	Denmark
T-06706	<u>Campanula rotundifolia</u>	Denmark
T-06707	<u>Campanula rotundifolia</u>	Norway
T-06708	<u>Campanula rotundifolia</u>	Belgium
T-06709	<u>Campanula species</u>	Commercial
T-06711	<u>Caragana arborescens</u>	Czechoslovakia
422453	<u>Caragana frutex</u>	Germany
310390	<u>Caragana species</u>	USSR
T-03681	<u>Ceanothus fendleri</u>	Arizona
T-06720	<u>Centaurea cyanus</u>	Denmark
T-06721	<u>Centaurea cyanus</u>	Denmark
400293	<u>Centrosema pubescens</u>	Rhodesia
400294	<u>Centrosema pubescens</u>	Rhodesia
T-07143	<u>Cheiranthus allionii</u>	Norway
T-06724	<u>Chrysanthemum coronarium</u>	Denmark
T-06725	<u>Chrysanthemum coronarium</u>	Denmark
T-06726	<u>Chrysanthemum leucanthemum</u>	Denmark
T-06727	<u>Chrysanthemum leucanthemum</u>	Denmark
T-06728	<u>Chrysanthemum leucanthemum</u>	Denmark
T-06729	<u>Chrysanthemum segetum</u>	Denmark
T-06730	<u>Chrysanthemum segetum</u>	Denmark
T-06731	<u>Chrysanthemum segetum</u>	Denmark
T-06732	<u>Chrysanthemum species</u>	Korea
T-07144	<u>Chrysopsis villosa</u>	Norway

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
T-06733	<u>Cichorium intybus</u>	Denmark
T-06739	<u>Coronilla emerus</u>	Norway
T-06740	<u>Coronilla minima</u>	Norway
384840	<u>Coronilla varia</u>	Iran
T-06754	<u>Corydalis sempervirens</u>	Denmark
T-06755	<u>Corydalis sempervirens</u>	Denmark
322500	<u>Desmodium species</u>	Brazil
T-06786	<u>Desmodium species</u>	Mexico
T-06788	<u>Digitalis purpurea</u>	Denmark
T-06789	<u>Digitalis purpurea</u>	Denmark
T-07158	<u>Epilobium adenocaulon</u>	Denmark
T-07159	<u>Epilobium hornemannii</u>	Greenland
T-07160	<u>Epilobium palustre</u>	Denmark
T-07161	<u>Epilobium palustre</u>	Denmark
T-07162	<u>Epilobium palustre</u>	Denmark
T-07163	<u>Erigeron compositus</u>	Greenland
T-07164	<u>Erigeron compositus</u>	Norway
T-06810	<u>Gailardia pulchella</u>	N. Carolina
T-07166	<u>Gilia achilleifolia</u>	Denmark
T-06811	<u>Gilia capitata</u>	Denmark
364849	<u>Glycine wightii</u>	S. Africa
163453	<u>Glycine soja</u>	Georgia
T-06820	<u>Hypochoeris radicata</u>	Denmark
T-06821	<u>Hypochoeris radicata</u>	Denmark

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
T-06822	<u>Hypochoeris radicata</u>	Denmark
T-06823	<u>Hypochoeris radicata</u>	Denmark
383670	<u>Iris</u> species	Turkey
380883	<u>Juncus</u> species	Iran
195996	<u>Lathyrus cicera</u>	Ethiopia
345999	<u>Lathyrus japonicus</u>	Norway
T-06840	<u>Lathyrus japonicus</u> ssp. <u>maritimus</u>	France
T-06843	<u>Lathyrus</u> <u>maritimus</u>	Norway
T-06844	<u>Lathyrus</u> <u>maritimus</u>	Norway
T-06845	<u>Lathyrus</u> <u>maritimus</u>	Denmark
T-06846	<u>Lathyrus</u> <u>maritimus</u>	Denmark
T-06847	<u>Lathyrus</u> <u>maritimus</u>	Denmark
T-06848	<u>Lathyrus</u> <u>maritimus</u>	Greenland
T-06849	<u>Lathyrus</u> <u>maritimus</u>	Denmark
T-07172	<u>Lathyrus</u> <u>maritimus</u> ssp. <u>acutifolius</u>	Denmark
T-06855	<u>Lathyrus</u> <u>sylvestris</u>	Norway
T-06856	<u>Lathyrus</u> <u>sylvestris</u>	Norway
T-06920	<u>Lespedeza</u> species	Korea
341781	<u>Ligustrum</u> species	Canada
T-06927	<u>Lubelia</u> species	Commercial
T-06933	<u>Lonicera</u> <u>periclymenum</u>	Denmark
283637	<u>Lupinus</u> <u>angustifolius</u>	Australia
383692	<u>Lupinus</u> <u>angustifolius</u>	Australia
T-07183	<u>Lupinus</u> <u>arcticus</u> v. <u>prunophilus</u>	Canada

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
189160	<u>Lupinus luteus</u>	Holland
303052	<u>Lupinus luteus</u>	S. Africa
316288	<u>Lupinus luteus</u>	Hungary
326277	<u>Lupinus luteus</u>	USSR
326278	<u>Lupinus luteus</u>	USSR
326279	<u>Lupinus luteus</u>	USSR
338648	<u>Lupinus luteus</u>	Morocco
368920	<u>Lupinus luteus</u>	Australia
368921	<u>Lupinus luteus</u>	Hungary
316290	<u>Lupinus mutabilis</u>	Argentina
T-06970	<u>Lupinus nanus</u>	Denmark
T-06972	<u>Lupinus succulentus</u>	Denmark
T-06973	<u>Lupinus species</u>	New York
T-07974	<u>Lythrum salicaria</u>	Denmark
T-07974	<u>Lythrum salicaria</u>	Denmark
T-06978	<u>Malva moschata</u>	Belgium
T-06979	<u>Malva moschata</u>	Denmark
T-06980	<u>Malva moschata</u>	Denmark
T-06981	<u>Malva moschata</u>	Denmark
227452	<u>Medicago lupulina</u>	Iran
T-06997	<u>Medicago polymorpha</u>	France
T-06998	<u>Medicago polymorpha</u>	France
T-13272	<u>Melilotus alba</u>	Iowa
322560	<u>Melilotus alba</u>	Brazil

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
383705	<u>Melilotus alba</u>	Turkey
325420	<u>Melilotus alba</u> var. <u>annua</u>	USSR
289314	<u>Melilotus officinalis</u>	Hungary
325427	<u>Melilotus officinalis</u>	USSR
308068	<u>Melilotus officinalis micranthus</u>	Czechoslovakia
T-0702-	<u>Mimulus guttatus</u>	Denmark
T-07028	<u>Monarda fistulosa</u>	Norway
T-07188	<u>Nemophila maculata</u>	Denmark
T-07189	<u>Nemophila menziensii</u>	Denmark
T-07190	<u>Nemophila menziensii</u> var. <u>atomaria</u>	Denmark
T-07191	<u>Nemophila menziensii</u> var. <u>insignis</u>	Denmark
T-07029	<u>Oenothera biennis</u>	Denmark
T-07030	<u>Oenothera biennis</u>	Denmark
T-07192	<u>Oxytropis campestris</u> ssp. <u>sordida</u>	Norway
T-07031	<u>Papaver rhoeas</u>	Denmark
T-07032	<u>Papaver rhoeas</u>	Denmark
T-07033	<u>Papaver rhoeas</u>	Denmark
T-07035	<u>Penstemon alpinus</u>	Norway
T-07195	<u>Penstemon grandifloris</u>	Nebraska
T-07196	<u>Penstemon tolmiei</u>	Norway
T-07038	<u>Penstemon digitalis</u>	Pennsylvania
322580	<u>Phaseolus atropurpureus</u>	Australia

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
T-07046	<u>Phlox</u> species	Commercial
T-07049	<u>Plantago</u> <u>maritima</u>	Denmark
T07050	<u>Plantago</u> <u>maritima</u>	Denmark
T-07197	<u>Plantago</u> <u>maritima</u> ssp. <u>borealis</u>	Greenland
T-07056	<u>Potentilla</u> <u>recta</u>	Denmark
T-07058	<u>Psophocarpus</u> <u>tetragonolobus</u>	Local
T-07059	<u>Psophocarpus</u> <u>tetragonolobus</u>	Malasia
T-07060	<u>Psophocarpus</u> <u>tetragonolobus</u>	Nigeria
T-07061	<u>Psophocarpus</u> <u>tetragonolobus</u>	Malasia
T-07062	<u>Psophocarpus</u> <u>tetragonolobus</u>	Malasia
T-07063	<u>Psophocarpus</u> <u>tetragonolobus</u>	Malasia
T07064	<u>Psophocarpus</u> <u>tetragonolobus</u>	Malasia
238252	<u>Psoralea</u> <u>bituminosa</u>	Spain
283966	<u>Psoralea</u> <u>bituminosa</u>	France
T-07066	<u>Ranunculus</u> <u>acris</u>	Norway
T-07067	<u>Ranunculus</u> <u>acris</u>	Belgium
T-07202	<u>Ranunculus</u> <u>pygmaeus</u>	Norway
T-07069	<u>Ranunculus</u> <u>repens</u>	Norway
T-07068	<u>Ranunculus</u> <u>reptans</u>	Norway
T-07070	<u>Ranunculus</u> <u>sceleratus</u>	Norway
T-07203	<u>Ranunculus</u> <u>sulphureus</u>	Svalbard
420257	<u>Reseda</u> <u>lutea</u>	Iran
370208	<u>Rosa</u> species	Yugoslavia
370209	<u>Rosa</u> species	Yugoslavia
381013	<u>Rosa</u> species	Iran

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
383745	<u>Rosa species</u>	Turkey
T-07087	<u>Sanquisorba officinalis</u>	Norway
T-07088	<u>Saponaria officinalis</u>	Denmark
T-07089	<u>Saponaria officinalis</u>	Denmark
T-07090	<u>Sedum species</u>	Commercial
T-07210	<u>Silene acaulis</u>	Greenland
T-07091	<u>Silene armeria</u>	Denmark
372359	<u>Tagetes erecta</u>	USSR
350697	<u>Tagetes patula</u>	Netherlands
T-07098	<u>Tanacetum vulgare</u>	Norway
T-07099	<u>Tanacetum vulgare</u>	Norway
T-07101	<u>Trifolium aureum</u>	Canada
T-07102	<u>Trifolium aureum</u>	Denmark
T-07103	<u>Trifolium pilulare</u>	Denmark
233286	<u>Trifolium purpureum</u>	Israel
238370	<u>Trifolium purpureum</u>	Lebanon
238371	<u>Trifolium purpureum</u>	Cyprus
292482	<u>Trifolium purpureum</u>	Israel
292483	<u>Trifolium purpureum</u>	Israel
292484	<u>Trifolium purpureum</u>	Israel
241117	<u>Trifolium medium</u>	New Zealand
297381	<u>Trifolium medium</u>	Norway
T-07105	<u>Trifolium spumosum</u>	France
T-07104	<u>Trifolium spumosum</u>	Denmark
268349	<u>Trifolium usambarense</u>	Belgian Congo

<u>PI or BN Number</u>	<u>Name</u>	<u>Source</u>
120210	<u>Trifolium</u> species	Turkey
233284	<u>Trifolium</u> species	Israel
369145	<u>Trifolium</u> species	Australia
369146	<u>Trifolium</u> species	Australis
369147	<u>Trifolium</u> species	Australia
369149	<u>Trifolium</u> species	Turkey
308119	<u>Vicia</u> <u>sepium</u>	Czechoslovakia
346068	<u>Vicia</u> <u>sepium</u>	Norway
T-07112	<u>Vicia</u> <u>sepium</u>	Norway
T-07113	<u>Vicia</u> <u>sepium</u>	Norway
T-07114	<u>Vicia</u> <u>sepium</u>	Denmark
T-07115	<u>Vicia</u> <u>sepium</u>	Denmark
383469	<u>Zornia</u> <u>dyctiocarpa</u>	Australia
321417	<u>Zornia</u> species	Brazil

Plant Performance

The tables that follow contain all plants in initial observation and seed increase during 1979. Some of the plants evaluated are undoubtedly better adapted to areas other than Beltsville. This should be considered when selecting plants for further tests. Lack of space prohibits stating detailed information. However, more information can usually be supplied upon request.

--In a few cases the source of a plant is not its origin.

--Since seed quality of new introductions is usually not known, poor or no germination may occur at planting. This is also reflected in the remarks column.

--All plants are started in the greenhouse and later transferred to cold frames before final placement in the field.

1979 Performance - Grasses

Code:

A = annual

Ab = abundance

B = bunch

Er = erect

H = harsh

M = medium

P = perennial

Pr = prostrate

R = rhizomatous

S = sod-forming

Sf = soft

So = solitary

Tx = texture

1 = excellent

3 = good

5 = fair

7 = poor

9 = none

Example: 150-100x70

150 = seedhead height

100 = foliage height

70 = foliage width @

foliage height

Pl or T Number	Source	Transplant Date	Habit	Vigor	Foliage Ab Tx	-----Seeding Habits----- Amt. Fill Mat. Date	Measure(cm)	Remarks
<u>Agrostis canina L.</u>								
T07120	France	05/78	S	5	1 Sf	7 0 07/09	25-15x30	
<u>Alopecurus arundinaceus Poir.</u>								
229529	Iran	05/79		3	1 M	9	30x40	
380664	Iran	05/79		3	7 M	9	15x15	
<u>Alopecurus geniculatus L.</u>								
T06641	Denmark	05/79		5	3 M	9	10x15	
T06642	Denmark	05/79		5	3 Sf	9	10x25	
<u>Alopecurus pratensis L.</u>								
T06643	France	05/79		3	1 Sf	7 0 08/01	40-30x30	
380670	Iran	05/79		5	7 M	9	15x15	
380671	Iran	05/79		5	7 M	9	20x15	
380672	Iran	05/79	S	3	1 M	9	30x40	Spreading.
380673	Iran	05/79		5	7 M	9	20x15	
383586	Turkey	05/79		5	3 M	9	10x15	Cultivated out.
<u>Ammophila arenaria (L.) Link</u>								
T06650	Norway							Sent to New Jersey.
T06651	Denmark							Sent to New Jersey.
355939	Israel	05/78	PB	7	7			Died.
<u>Antheophora pubescens Nees.</u>								
414420	S. Africa	05/79	PB	1	3 M	3 5 08/24	110-50x30	
414423	S. Africa	05/79	PB	3	3 M	5 9 09/04	100-50x40	
414425	S. Africa	05/79	PB	1	1 M	3 7 09/04	150-60x70	
414427	S. Africa	05/79	PB	1	1 M	3 7 09/04	140-60x60	
414430	S. Africa	05/79	PB	1	1 M	3 5 08/08	160-70x70	
414431	S. Africa	05/79	PB	1	1 M	3 7 08/01	170-60x70	Best antheophora.
414434	S. Africa	05/79	PB	3	3 M	5 7 08/17	120-50x35	
414438	S. Africa	05/79	PB	3	3 M	5 7 08/08	120-50x40	
414439	S. Africa	05/79	PB	3	3 M	5 9 09/04	100-50x50	
414443	S. Africa	05/79	PB	1	1 M	3 7 09/11	120-50x50	
<u>Brachypodium sylvaticum (Huds.) Beauv.</u>								
		05/79	B	3	1 Sf	07/03	80-40x50	Grown for identification.
<u>Bromus erectus Huds.</u>								
380762	Iran	04/76	PB	7	7 Sf	7 5 06/12	70-20x20	
<u>Bromus hordeaceus L.</u>								
T06687	Norway	05/79		5	1 M	9	25x25	
T06688	Denmark	05/79		7	3 M	9	20x30	Severe rust, only one plant alive.
T06689	Denmark	05/79		7				Died during hot weather.
T06690	Denmark	05/79		3	3 Sf	9	35x35	
T06691	Denmark	05/79		5	1 Sf	9	30x25	Rust.
<u>Bromus ramosus Huds.</u>								
T07132	Denmark	05/79		3	1 H	9	30x25	
T07133	Denmark	05/79		3	3 M	9	30x40	
<u>Bromus ramosus ssp. benekeni</u>								
T07131	Denmark	05/79		3	3 M	9	25x30	
<u>Bromus secalinus L.</u>								
T06692	Denmark	05/79		1	3 Sf	9	30x30	
<u>Bromus secalinus var. velutinus (Schrad.) Koch.</u>								
T07134	Denmark	05/79		3	1 Sf	9	30x30	
<u>Bromus tomentellus Boiss.</u>								
380763	Iran	04/76	PB	5	7 M	7 7 06/12	90-30x30	
380770	Iran	05/79		7	7 Sf	9	10x15	
380772	Iran	05/79		5	7 M	9	20x25	
380774	Iran	05/79		7	7 Sf	9	10x15	
380775	Iran	05/79		5	3 Sf	5 5 08/04	70-25x20	
383616	Turkey	05/79		7				Died.
383619	Turkey	05/79		5	3 M	9	20x25	
383620	Turkey	05/79		7				Died.
384811	Iran	05/79		7	3 Sf	9	10x20	
384817	Iran	05/79		7	3 M	9	20x20	
384818	Iran	05/79		5	3 M	9	25x25	
384321	Iran	05/79		7	7 M	9	10x10	
384828	Iran	05/79		5	7 M	7 5 07/24	50-30x30	

1979 Performance - Grasses (cont'd.)

Code:

A = annual M = medium Sf = aoft 1 = excellent Example: 150-100x70
 Ab = abundance P = perennial So = solitary 3 = good 150 = seedhead height
 B = bunch Pr = prostrate Tx = texture 5 = fair 100 = foliage height
 Er = erect R = rhizomatous 7 = poor 70 = foliage width &
 H = harsh S = sod-forming 9 = none foliage height

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage		-----Seeding Habits-----			Measure(cm)	Remarks
					Ab	Tx	Amt.	Fill	Mat. Date		
<u>Calamagrostis arundinacea</u> (L.) Roth											
286474	Japan	05/79	B	3	3	H	9			30x30	
325240	USSR	05/79	B	7	7	H	9			25x10	
345968	Norway	05/77	PB	1	3	M	5	7	07/03	130-50x40	
<u>Calamagrostis neglecta</u> (Ehrh.) Gaertn.											
345973	Norway		S	1	1	Sf	9			20x40	Very rhizomatous.
<u>Dactylia glomerata</u> L.											
368881	Portugal	05/79	PB	3	3	M	7	5	08/01	70-35x40	
<u>Dactylis marina</u> Borrill											
T07149	Portugal	05/79	B	3	1	Sf	7	9	08/31	70-25x30	
346967	Wales	05/79	B	3	1	Sf	7	5	08/01	40-20x25	
346968	Portugal	05/79	B	3	3	M	7	5	08/01	40-25x25	
346969	Wales	05/79	B	3	1	Sf	7	9	08/06	45-30x30	
346970	Portugal	05/79	B	3	1	M	7	5	08/01	40-25x30	
<u>Deschampsia cespitosa</u> (L.) Beauv.											
T06777	Norway	05/79		1	1	Sf	9			20x25	
383640	Turkey	04/78	B	5	3	M	7	9	07/03	60-10x20	
<u>Deachampsia cespitosa</u> ssp. <u>beringensis</u> (Hulten) Lawr.											
T07150	Canada	05/79		1	1	M	9			20x30	
<u>Digitaria mombabana</u> C.E. Hubb.											
406167	Kenya	05/79	B	5	3	M	5	1	08/31	60-20x30	May be contaminant.
<u>Elymus arenarius</u> L.											
345978	Norway	05/79	B	1	3	H	9			35x40	Very blue color.
<u>Elymus sibiricus</u> L.											
325315	USSR	05/78	PB	1	1	M	3	3	08/27	80-60x50	
326267	USSR	05/78	B	3	7	M	9			30x30	Cultivated out.
326268	USSR	05/77	PB	5	3	Sf	9			30x35	
369236	USSR	05/79	B	1	1	H	5	5	09/10	65-60x40	
<u>Elymus species</u>											
378053	Argentina	05/79	B	7	7		9			15x15	Severe rust, nearly dead.
<u>Eragrostis bicolor</u> Nees.											
409817	S. Africa	05/78	PB	3	3	M	7	7	10/06	80-30x30	
<u>Eragrostis lehmanniana</u> Nees.											
T13189	Arizona	05/75	PB	3	3	Sf	7	7	10/15	100-50x60	
<u>Festuca ovina</u> L.											
380849	Iran	05/77	PB	1	1	Sf	3	3	06/18	60-20x25	
<u>Haynaldia villosa</u> (L.) Schur.											
368885	Australia	05/79	B	3	3	M	1	1	08/25	50-30x20	
<u>Helictotrichon pubescens</u> (Huds.) Pilger											
413794	France	05/77	PB	3	7	Sf	5	3	06/05	85-45x45	
<u>Hyparrhenia anthistirioides</u> (A. Rich.) Stapf.											
331392	Ethiopia		PB	1	1	H	1	7		450-400x150	
<u>Panicum deustum</u> Thunb.											
410226	S. Africa	05/78	PB	1	3	M	3	3	09/19	150-90x90	
<u>Panicum maximum</u> Jacq.											
409034	Brazil	05/79	PB	1	1	H	9			180-140x240	Very large leaves.
410251	S. Africa	05/78	PB	1	1	M	3	3		140-80x100	
410252	S. Africa	05/78	PB	1	1	M	3	3		150-85x110	
410254	S. Africa	05/78	PB	1	1	M	3	3		150-80x100	
410255	S. Africa	05/78	PB	1	1	M	1	3		130-75x100	
<u>Paspalum plicatulum</u> Michx.											
339896	Australia		PB	1	1	M	7	3	07/18	100-100x80	
339897	Australia		PB	1	1	M	7	3	07/18	80-80x70	

1979 Performance - Grasses (cont'd.)

Code:

A = annual
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H = harsh

M = medium
P = perennial
Pr = prostrate
R = rhizomatous
S = sod-forming

Sf = soft
So = solitary
Tx = texture

1 = excellent
3 = good
5 = fair
7 = poor
9 = none

Example: 150-100x70
150 = seedhead height
100 = foliage height
70 = foliage width & foliage height

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage Ab	Tx	-----Seeding Habits----- Amt. Fill Mat. Date	Mesaure(cm)	Remarks
<u>Piptochsetum</u> Species									
368-91	Austrslia	06/79	PB	5	3	M	7 1	60-30x30	
<u>Poa alpina</u> L.									
284251	Czecho.	05/77	PS	3	3	Sf	3 7 06/12	30-5x15	
<u>Poa kelloggi</u> Vassy.									
T07198	Frnce	05/77	PR	5	7	Sf	5 5 06/12	35-10x40	
<u>Tetrachne dregei</u> Nees.									
410370	S. Africa	05/78	PB	3	1	Sf	5 9 07/24	100-45x50	
<u>Themeda triandra</u> Forsk.									
410373	S. Africa	05/78	PB	3	3	M	5 5 10/15	130-50x70	
<u>Bromus tomentellus</u> Boiss.									
383621	Turkey								No germination.
384816	Iran								No germination.
384820	Iran								No germination.
384822	Iran								No germination.
<u>Bromus</u> species									
314647	USSR								No germination.
<u>Calamagrostis canescens</u>									
345969	Norway								No germination.
<u>Calamagrostis neglecta</u> (Ehrh.) Gsertn.									
T06697	Norway								No germination.
<u>Elymus sibiricus</u> L.									
326267	USSR								No germination.
1979 Performance - Legumes									
<u>Amphicarps bracteata</u>									
T13273		05/79		7	7	M	9	10x30	Dead 09/10/79.
<u>Astragalus</u> spscies									
202149	Argentina		Pr	3	3	M	1 1 05/20	15x30	
383604	Turkey		Pr	5	3	M	9	12x25	
<u>Biserrula pelcinus</u> L.									
365646	Spain		Pr	3	3	M	1 1 05/20	10-10x20	
<u>Calopogonium caeruleum</u>									
T06700	Malasia		Pr	1	3	M	9		Vine.
<u>Cassia</u> species									
322325	Brazil		So	1	3	H	7 1 11/01	400-400x300	Small tree, showy yellow blossoms.
<u>Caragana frutex</u> (L.) Koch.									
422453	Germany		So	5	7	M	9		Shrub, showy yellow blossoms.
<u>Centrosema pubescens</u> Benth.									
400293	Rhodesia		Pr	3	3	M	9		Vine.
400294	Rhodesia		Pr	3	3	M	9		Vine.
<u>Coronilla minima</u> L.									
T06740	Norway			7	7	Sf	9	5x5	
<u>Coronilla varia</u> L.									
T06753	France	05/79	P, R	3	1	Sf	5 1 07/03	25-25x50	
400297	Rhodesia	04/77	P, R	1	A	Sf	3 1 07/15	60-40x100	Looks very good during hot weather.
<u>Crotalaria</u> species									
409730	S. Africa		Pr	3	3	Sf	7 3 07/15	25-25x40	

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Er = erect R = rhizomatous 7 = poor 70 = foliage width &
H = herb S = sod-forming 9 = none foliage height

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage Ab Tx	Seeding Habits Amt. Fill Mat. Date	Measure (cm)	Remarks
<u>Desmodium intortum</u> (Mill.) Fawc. & Rendle								
311122	Honduras		Er	3	3	H 7 3	120-100x100	
312129	Guatemala		Er	3	3	H 9	100x80	
<u>Desmodium species</u>								
T06786	Mexico	05/79	Er	5	5	H 9	45x45	Bean beetle damage.
312169	Mexico		So	5	5	H 9		Prostrate shrub.
319471	Tanzania		So	1	1	H 9		Mixture tree & vine similar to 322504.
322500	Brazil	05/79	So	7	7	H 9	10x10	
322501	Brazil		So	1	3	H 9		Vine.
322504	Brazil		So	1	1	H 9		Vine, completely cover ground 20 foot radius.
322505	Brazil		So	3	3	H 3 3	100-80x80	Shrub.
<u>Glycine soja</u> Sieb. & Zucc.								
163453	N. Carolina		Pr	1	1	Sf 1 1		
<u>Glycine wightii</u> (Griseb. ex Wight & Arn.) Verdc.								
317896	Tanzania		Pr	1	1	Sf 3 1 06/15		
<u>Hedysarum species</u>								
383660	Turkey	05/78	So	7	3	M 9	15x20	
<u>Lathyrus japonicus</u>								
T06843	Norway			3	3	M 9	20x50	
T06844	Norway			3	3	M 9	25x55	
T06845	Denmark			3	3	M 9	20x45	
T06846	Denmark			3	3	M 9	25x50	
T06847	Denmark			3	3	M 9	25x60	
T06848	Greenland			3	3	M 9	20x40	
T06849	Denmark			3	3	M 9	25x50	
345999	Norway			3	3	M 9	20x50	
<u>Lathyrus japonicus</u> ssp. <u>ecutifolius</u>								
T07172	Denmark			3	3	M 9	25x50	
<u>Lathyrus japonicus</u> ssp. <u>maritimus</u>								
T06840	France			3	3	M 9	25x60	
<u>Lathyrus sylvestris</u> L.								
T06855	Norway			1	1	M 5 5	40x100	
T06856	Norway			3	1	M 7 5	35x100	
282688	Sweden			1	1	M 3 3	45x160	
<u>Lathyrus species</u>								
316414	Finland		R	3	1	Sf 9	30x60	Spreads rapidly by rhizome.
<u>Lespedeza species</u>								
T06920	Korea	05/79		3	3	M 9	120x50	
<u>Lotus species</u>								
T11323	Turkey		Pr	3	1	Sf 9	15x50	
<u>Lupinus angustifolius</u> L.								
283637	Portugal		So	5	5	M 7 7	50x30	
<u>Lupinus ercticus</u> var. <u>prunophilus</u>								
T07183	Canada		So	1	1	M 9	30x50	
<u>Lupinus luteus</u> L.								
189160	Holland		So	3	3	M 9	50x25	
303052	S. Africa		So	1	3	M 3 3	80-60x35	
326277	USSR		So	1	3	M 5 3	70-50x25	
326278	USSR		So	3	5	M 7 5	50-30x20	
326279	USSR		So	1	3	M 3 3	80-65x40	
338648	Morocco		So	1	3	M 3 3	75-60x35	
368920	Australia		So	3	5	M 9	35x25	
368921	Hungary		So	3	5	M 7 5	50-40x25	
<u>Lupinus nanus</u>								
T06970	Denmark		B	1	1	Sf 5 7	65-40x50	Nice looking lupine.
<u>Lupinus succulentus</u>								
T06972	Denmark		So	3	3	M 5 5	60-40x35	

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150 = seedhead height

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PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage		-----Seeding Habits-----				Measure(cm)	Remarks
					Ab	Tx	Amt.	Fill	Mat.	Date		
<u>Lupinus species</u>												
T06973	New York		So	1	1	M	5	5			100-50x50	Beautiful tall flower spikes.
<u>Macroptilium atropurpureum</u> (DC.) Urb.												
298625	China		B	1	1	M	1	1			20-20x300	
300997	China		B	3	1	Sf	1	1			15-15x200	
322575	Brazil		B	3	1	Sf	1	1			25-35x300	
322576	Australia		B	1	1	M	1	1			25-20x300	
322577	Australia		B	1	1	M	1	1			25x20x170	
322578	Australia		B	1	1	M	1	1			20-20x220	
322581	Australia		B	1	1	M	1	1			15-15x280	
<u>Medicago falcata</u> L.												
236606	France	05/78	B	3	3	M	7	3		07/03	70-70x80	
<u>Medicago lupulina</u> L.												
227452	Iran		Pr	5	5	M	3	3			10-10x50	
<u>Medicago polymorpha</u> L.												
T06997	France		Pr	3	5	M	5	5			10-10x60	
T06998	France		Pr	3	5	M	5	5			10-10x50	
<u>Melilotus alba</u> Medik.												
T07025	France	05/78	So	1	3	M	5	3		07/25	140-75x60	
T13272	Iowa	05/79	So	3	1	Sf	9				45x75	
322560	Brazil		So	1	3	M	1	1		07/03	110-80x50	
383705	Turkey		So	1	3	M	9				100x50	
383707	Turkey	05/78	So	1	3	Sf	5	1		08/01	130-100x70	
<u>Melilotus alba</u> var. <u>annua</u> Coe.												
325420	USSR	05/79	So	1	3	Sf	3	1		07/25	110-90x100	
<u>Melilotus officinalis</u> Lam.												
289314	Hungary	05/78	So	1	1	M	1	1		07/24	170-140x120	
314465	USSR	05/78	So	5	3	Sf	5	1		07/03	50-30x90	
325422	USSR	05/78	So	7	5	Sf	9				25x25	Dead 07/12/79.
325423	USSR	05/78	So	7	7	Sf	7	1		09/19	35-30x40	
325425	USSR	05/78	So	7	7	M	9				20-20x30	
325427	USSR	05/78	So	1	1	M	1	1		07/25	120-100x80	
383708	Turkey	05/78	So	5	3	M	5	1		06/25	60-40x30	
T11324	Turkey	05/78	So	1	1	M	1	1			120-90x80	
<u>Melilotus officinalis</u> var. <u>micranthus</u>												
308068	Czecho.	05/79	So	3	1	M	9				40x50	
<u>Psophocarpus tetragonolobus</u> (L.) DC.												
T07058	Malasia		B	1	3	M	9					
T07059	Malasia		B	1	3	M	9					
T07060	Nigeria		B	1	3	M	9					
T07061	Malasia		B	1	3	M	9					
T07062	Malasia		B	1	3	M	9					
T07063	Malasia		B	1	3	M	9					
T07064	Malasia		B	1	3	M	9					
<u>Psoralea bituminosa</u> L.												
238352	Spain		So	5	3	M	9				30x30	
283966	France		So	3	3	M	5	5			60-40x40	
<u>Stylosanthes fruticosa</u> (Retz.) Alst.												
400309	Rhodesia		B	3	1	M	3	1			25-25x30	
<u>Trifolium aureum</u> Poll.												
T07101	Denmark		B	3	1	M	7	5			25-20x25	
T07102	Canada		B	3	1	M	9				20x30	
<u>Trifolium lupinaster</u> L.												
346041	Norway	04/77	Pr	7	3	M	7	9			15-10x10	
<u>Trifolium medium</u> L.												
297381	Norway		Pr	5	3	M	7	9			20-20x40	
<u>Trifolium purpureum</u> Loisel.												
233286	Israel		B	3	3	M	7	7				
238370	Lebanon		B	3	3	M	7	7				
238371	Cyprus		B	3	3	M	7	7			5-5x20	

1979 Performance - Legumea (cont'd.)

Code:
A = annual M = medium Sf = soft 1 = excellent Example: 150-100x70
Ab = abundance P = perennial So = solitary 3 = good 150 = seedhead height
B = bunch Pr = prostrate Tx = texture 5 = fair 100 = foliage height
Er = erect R = rhizomatous 7 = poor 70 = foliage width &
H = harsh S = sod-forming 9 = none foliage height

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage Ab Tx		----Seeding Habits---- Amt. Fill Mat. Date		Measure(cm)	Remarks
<u>Trifolium purpureum</u> Loisel. (cont'd.)										
292482	Israel		B	1	3	M	7	7	40-40x40	Very showy plant.
292483	Israel		B	1	3	M	3	7	35-30x30	
292484	Israel		B	1	3	M	9			
<u>Trifolium spumosum</u> L.										
T07104	Denmark		B	1	1	M	1	1	30-30x50	
T07105	France		B	3	3	M	3	3	20-20x30	
<u>Trifolium subterraneum</u> L.										
T07106	France		B	3	1	Sf	1	5	20-25x50	
<u>Trifolium usabarense</u> Taub.										
268349	Belgian Congo		Pr	3	3	Sf	9		15x50	Spreads by layering.
<u>Trifolium</u> species										
120210	Turkey		A, Pr	3	3	Sf	1	3	07/03	20-15x40
233284	Israel			3	3	Sf	9			
369145	Australia		Pr	3	3	Sf	3	3	07/03	15-15x30
369146	Australia			3	3	Sf	3	7		
369147	Australia		Pr	1	3	Sf	3	7	07/15	15-15x40
369149	Turkey		Pr	3	3	Sf	5	7	07/20	10-10x40
<u>Vicia sepium</u> L.										
T07112	Norway		Pr		1	Sf	9			
T07113	Norway		Pr		1	Sf	9			
T07114	Denmark		Pr		1	Sf	9			
T07115	Denmark		Pr		1	Sf	9			
308119	Czecho.		Pr		1	Sf	9			
346068	Norway		Pr		1	Sf	9			
346069	Norway		Pr		1	Sf	9		40x80	
<u>Vicia venosissima</u> Nakai										
317310	Korea	05/78	B	3	3	Sf	3	5	05/79	30-30x50 Very showy flowers & seed pods.
<u>Vigna</u> species										
192968	E. Africa	05/78	Pr	3	3	M	9		20x200	
344755	Kenya	05/78	Pr	3	1	M	7	3	20-20x200	
<u>Zornia dyctiocarpa</u> DC.										
282569	Australia			7	5	M	9			
<u>Zornia</u> species										
321-17	Brazil			7	5	M	7	3	20-20x50	
<u>Caragana arborescens</u>										
T06711	Czecho.									No germination.
<u>Caragana</u> species										
310390	USSR									No germination.
<u>Coronilla emerus</u> L.										
T06739	Norway									No germination.
<u>Glycine wightii</u> (Graph. ex wight & Arn.) Verdc.										
364849	S. Africa									No germination.
<u>Lathyrus cicera</u> L.										
195996	Ethiopia									No germination.
<u>Lupinus angustifolius</u> L.										
383692	Turkey									No germination.
<u>Lupinus luteus</u> L.										
316288	Hungary									No germination.
<u>Lupinus mutabilis</u>										
316290	Argentina									No germination.
<u>Macroptilium atropurpureum</u> (DC.) Urb.										
322580	Australia									No germination.

1979 Performance - Legumes (cont'd.)

Code:

A = annual	M = medium	Sf = soft	1 = excellent	Example: 150-100x70 150 = seedhead height 100 = foliage height 70 = foliage width & foliage height
Ab = abundance	P = perennial	So = solitary	3 = good	
B = bunch	Pr = prostrate	Tx = texture	5 = fsir	
Er = erect	R = rhizomatous		7 = poor	
H = harrah	S = sod-forming		9 = none	

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage		----Seeding Habits----				Measure(cm)	Remarks
					Ab	Tx	Amt.	Fill	Mat.	Date		
<u>Trifolium campestre</u> var. <u>minus</u>												
T07211	France											No germination.
<u>Trifolium medium</u> L.												
241117	New Zealand											No germination.
<u>Trifolium pilulare</u> Boiss.												
T07103	Denmark											No germination.
<u>Acacia albida</u> Del.												
407467	S. Africa	05/78	Er	3	5	H	9				60x60	
<u>Acacia</u> species												
308644	Brazil	05/78	Er	1	1	Sf	9				600x150	Very fast growing tree.
<u>Achillea millefolium</u> L.												
T06625	Denmark	05/79	R	1	1	Sf	5	5	08/06		30-10x35	
T06626	Denmark	05/79		1	1	Sf	5	5	08/22		60-25x50	
T06627	Denmark	05/79		1	1	Sf	7	5	09/07		80-35x50	
T06628	Denmark	05/79		1	1	M	7	5	08/31		50-25x30	
T06629	Greenland	05/79		1	1	Sf	7	7	08/22		55-25x50	
<u>Achillea ptarmica</u> L.												
T06630	Norway		Pr	7	5	Sf	9					
T06631	Denmark	05/79	Pr	3	3	Sf	3	5	08/31		30-30x50	
<u>Achillea</u> species												
380613	Iran	05/78	P	5	1	Sf	9				50-20x40	
383527	Turkey	05/79		7	5	Sf	9				20-20x20	
383528	Turkey	05/79		7	3	H	9				15x20	
<u>Armeris maritima</u> (Mill.) Willd.												
T06664	Norway		B	5	1	M	9				5x15	
T06665	Norway		B	3	1	M	7	5	05/23		15-5x20	
T06666	Greenland		B	5	1	M	9				5x15	
420339	Belgium	05/78	B	3	1	M	5	5			30-10x30	
421340	Belgium	05/78	B	3	1	M	5	5	06/12		30-5x15	
<u>Armeris maritima</u> ssp. <u>sibirica</u>												
T07124	Greenland		B	3	1	M	7	5			20-5x20	
<u>Artemisia vulgaris</u> L.												
T06672	Denmark	05/79	B	1	1	Sf	1	7	08/27		120-100x150	
<u>Asclepias tuberosa</u>												
421278	Nebraska		So	7	3	M	9					
<u>Atriplex canescens</u> (Pursh) Nutt.												
415852	S. Africa			3	3	M	9				50x30	
<u>Atriplex hortensis</u> L.												
T06680	Denmark		So	3	3	M	3	3			60-50x20	
<u>Atriplex hortensis</u> var. <u>rubra</u>												
T07126	Denmark	05/79	So	1	3	M	1	3	06/12		120-100x30	
<u>Atriplex littoralis</u> L.												
T07127	Norway			7	3	M	9					05/24/79 Dead.
<u>Atriplex patula</u> L. ssp. <u>patula</u>												
T06682	Denmark		Pr	5	5	M	5	1	05/20		15-10x30	
T06683	Denmark		Pr	3	5	M	3	1			15-10x50	
<u>Atriplex sabulosa</u> Rouy												
T07129	Norway		Er	3	5	M	9				30x25	

1979 Performance - Others (cont'd.)

Code:

A = annual
Ab = abundance
B = bunch
Er = erect
H = harsh

M = medium
P = perennial
Pr = prostrate
R = rhizomatous
S = sod-forming

Sf = soft
So = solitary
Tx = texture

1 = excellent
3 = good
5 = fair
7 = poor
9 = none

Example: 150-100x70
150 = seedhead height
100 = foliage height
70 = foliage width & foliage height

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage		----Seeding Habits----			Measure(cm)	Remarks
Ab	Tx	Amt.	Fill	Mat.	Date						
<u>Atriplex semibaccata</u> R.Br.											
368852	Australia		Er	1	5	M	5	3		60x20	
368853	Australia		Er	1	5	M	7	3		55x20	
<u>Atriplex</u> species											
330671	Israel	05/79	Er	3	3	M	9			40x20	
<u>Blackiella conduplicata</u> Aellen											
415865	S. Africa	05/78	Pr	1	3	M	1	3		25-25x100	
<u>Calendula officinalis</u> L.											
T06699	Spain		A	1	3	M	3	3		20-20x35	
<u>Campanula alliariaefolia</u> Willd.											
T07137	Belgium	05/79		1	3	M	9			20x30	
<u>Campanula rotundifolia</u> L.											
T06701	Denmark	05/79		7	7	M	9			5x10	
T06702	Denmark	05/79		5	3	M	7	5		30-20x30	
T06703	Denmark	05/79		7	7	M	9			5x10	
T06704	Denmark	05/79		5	3	M	7	5		10x15	
T06705	Denmark	05/79		5	3	M	7	5		40-5x10	
T06706	Denmark	05/79		5	3	M	7	5		45-10x30	
T06707	Norway	05/79		5	3	M	7	5		25-5x15	
T06708	Belgium			7	7	M	9				
<u>Campanula</u> species											
T06709		05/79		3	1	M				20x30	
<u>Centaurea cyanus</u> L.											
T06720	Denmark		So	1	3	M	1	5		60-55x30	
T06721	Denmark		So	3	3	M	1	7		70-60x30	
T11322	Iran		So	1	3	M	1	5		60-50x40	
<u>Cheiranthus allionii</u>											
T07143	Norway	05/79		1	1	M	9			20x40	
<u>Chrysanthemum coronarium</u> L.											
T06724	Denmark		So	1	1	Sf	3	7		170-165x100	
T06725	Denmark		So	1	1	Sf	5	7		120-115x90	
<u>Chrysanthemum leucanthemum</u> L.											
T06726	Denmark	05/79	B	1	1	M	7	7	10/22	50-25x60	
T06727	Denmark	05/79	B	1	1	M	5	7	08/17	40-15x35	
T06728	Denmark	05/79	B	1	1	M	7	7	08/08	50-20x40	
<u>Chrysanthemum segetum</u>											
T06729	Denmark		B	5	3	M	5	7		45-40x30	
T06730	Denmark		B	3	3	M	3	5		40-35x35	
T06731	Denmark		B	1	3	M	3	3		50-45x60	
<u>Chrysanthemum</u> species											
T06732	Korea		So	1	3	M	9			150-140x70	
<u>Chrysopsis villosa</u> (Pursh) Nutt.											
T07144	Norway		So	5	5	M	5	3			
<u>Cichorium intybus</u> L.											
T06733	Denmark		So	1	3	M	3	3		100-80x30	
<u>Corydalis aempervirens</u> (L.) Pera.											
T06754	Denmark			1	1	Sf	3	3		40-30x25	
T06755	Denmark			1	1	Sf	3	3		40-30x25	
<u>Epilobium adenocaulon</u> Hausskn.											
T07158	Denmark	05/79	So	1	1	M	3	5	08/07	70-40x20	
<u>Epilobium hornemannii</u> Reichb.											
T07159	Denmark		So	3	3	M	3	3	05/20	30-20x20	
<u>Epilobium palustre</u> L.											
T07160	Denmark	05/79	So	3	1	Sf	1	3	06/12	50-30x50	
T07161	Denmark	05/79	So	5	3	M	5	3	07/09	45-45x20	

1979 Performance - Others (cont'd.)

Code:

A = annual

Ab = abundance

B = bunch

Er = erect

H = harsh

M = medium

P = perennial

Pr = prostrate

R = rhizomatous

S = sod-forming

Sf = soft

So = solitary

Tx = texture

1 = excellent

3 = good

5 = fair

7 = poor

9 = none

Example: 150-100x70

150 = seedhead height

100 = foliage height

70 = foliage width &

foliage height

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage Ab Tx	-----Seeding Amt. Fill	Habits----- Mat. Date	Measure(cm)	Remarks
<u>Epilobium palustre</u> L. (cont'd.)									
T07162	Denmark	05/79	So	1	3 M	1 3	06/12	60-45x20	
<u>Erigeron compositus</u> Purs.									
T07163	Denmark	05/79		5	5 H	9			
T07164	Norway	05/79		5	7 H	7 3	07/12	15-5x5	
<u>Gaillardia pulchella</u> Foug.									
T06810	N. Carolina	05/79		1	1 M	1 3	08/08	60-50x90	
<u>Gilia achilleifolia</u> Benth.									
T07166	Denmark	05/79	So	3	3 M	3 3	06/18	50-40x50	
<u>Gilia capitata</u> Sims.									
T06811	Denmark	05/79	So	3	7 M	7 3	07/25	50-30x30	
<u>Hypericum</u> species									
345998	Norway	05/78	R	1	1 Sf	1 3	08/01	50-30x100	
<u>Hypochoeris radicata</u> L.									
T06820	Denmark	05/79		3	1 Sf	1 3	08/01	40-15x20	
T06821	Denmark	05/79		3	1 Sf	1 3	07/03	45-10x15	
T06822	Denmark	05/79		3	3 Sf	1 3	08/01	70-20x30	
T06823	Denmark	05/79		3	3 M	1 3	07/03	50-15x25	
<u>Iris</u> species									
383670	Turkey			7	7 H	9		15x5	
<u>Juncus</u> species									
380883		05/79	B	3	3 H	9		60-70x30	
<u>Lobelia</u> species									
T06927		05/79	So	3	3 M	7 5	08/15	50-40x15	
<u>Lythrum salicaria</u> L.									
T06974	Denmark	05/79	So	3	1 M	5 5	10/15	50-40x30	
T06975	Denmark	05/79	So	3	1 Sf	5 5	10/15	60-50x25	
<u>Malva moschata</u> L.									
T06978	Belgium	05/79	B	1	3 Sf	3 1	07/24	80-70x70	
T06979	Denmark	05/79	B	3	1 M	7 1	09/18	40-30x40	
T06980	Denmark	05/79	B	1	3 Sf	5 1	08/31	65-60x40	
T06981	Denmark	05/79	B	1	1 Sf	1 1	08/01	60-50x50	
<u>Marrubium</u> species									
380899	Iran	05/78	B	7	1 M	9		10x20	
<u>Mimulus guttatus</u> DC.									
T07027	Denmark	05/79	Pr	1	3 Sf	7 5		10x40	
<u>Monarda fistulosa</u> L.									
T07028	Norway	05/79	B	1	1 Sf	9		35x70	
<u>Nemophila maculata</u>									
T07188	Denmark			3	1 Sf	7		25-20x30	
<u>Nemophila menziesii</u>									
T07189	Denmark			1	1 Sf	5 5		25-20x35	
<u>Nemophila menziesii</u> var. <u>atomaria</u>									
T07190	Denmark			3	1 Sf	5 5		25-20x30	
<u>Nemophila menziesii</u> var. <u>insignis</u>									
T07191	Denmark			3	1 Sf	5 5		20-15x25	
<u>Papaver rhoeas</u> L.									
T07031	Denmark	05/79	B	7	5 Sf	7 3		40-20x30	
T07032	Denmark	05/79	B	3	1 Sf	1 3	06/19	50-30x40	
T07033	Denmark	05/79	B	3	1 Sf	1 3	06/05	50-40x30	

1979 Performance - Others (cont'd.)

Code:

A = annual

M = medium

Sf = aoft

1 = excellent

Example: 150-100x70

Ab = abundance

P = perennial

So = aolitary

3 = good

150 = seedhead height

B = bunch

Pr = prostrate

Tx = texture

5 = fair

100 = foliage height

Er = erect

R = rhizomatous

7 = poor

70 = foliage width &

H = harsh

S = aod-forming

9 = none

foliage height

Pl or T Number	Source	Transplant Date	Habit	Vigor	Foliage Ab Tx	----Seeding Habits----	Amt. Fill	Mat. Date	Measure(cm)	Remarks
<u>Penstemon alpinus</u>										
T07035	Norway	05/79		5	1 M	9			20x30	
<u>Penstemon digitalis</u> Nutt.										
T07038	Pennsylvania	05/78	B	1	1 M	1 1		07/09	120-75x80	
<u>Penstemon grandiflorus</u>										
T07195	Nebraska			3	3 M	9			15x20	
<u>Penstemon tolmei</u>										
T07196	Norway			5	3 M	9			10x15	
<u>Plantago maritima</u>										
T07049	Denmark		B	5	3 M	9			10x15	
T07050	Denmark		B	5	3 M	9			10x15	
<u>Plantago maritima</u> aap. <u>borealis</u>										
T07197	Greenland		B	5	3 M	9			10x10	
<u>Potentilla recta</u> L.										
T07056	Denmark	05/79	B	3	3 M	3 5		09/19	50-20x30	
314474	USSR	05/78	B	5	3 M	9			20x30	
<u>Reeseda lutea</u> L.										
420257	Iran			3	3 H	9			20x40	
<u>Rosa speciosa</u>										
383745				5	5 H	9			50x30	
<u>Salvia</u> cf. <u>verticillata</u> L.										
380900	Iran	05/74	B	1	1 M	5 5		06/25	50-20x30	
<u>Sanguisorba officinalis</u> L.										
312470	USSR	05/78	So	3	3 M	5 7		07/20	90-30x30	
<u>Saponaria officinalis</u> L.										
T07089	Denmark		So	3	5 M	5 5			45-30x20	
<u>Silene acaulis</u> (L.) Jacq.										
T07210	Denmark		B	7	3 Sf	9			5x15	
<u>Silene armeria</u> L.										
T07091	Denmark	05/79	Er	1	3 M	1 1		06/12	40-30x20	
<u>Tagetes erecta</u> L.										
372359	USSR		Er	1	3 M	1 1			60-45x20	
<u>Tagetes patula</u> L.										
350697	Netherlands		Er	1	1 M	3 1			40-35x40	
<u>Tanacetum vulgare</u> L.										
T07098	Norway	05/79	Er	1	1 Sf	9			50x75	
T07099	Norway	05/79	Er	1	1 Sf	7 7			110-40x70	
<u>Ceanothus fendleri</u>										
T03681	Arizona									No germination.
<u>Ligustrum speciosa</u>										
341781	Canada									No germination.
<u>Lonicera periclymenum</u>										
T06933	Denmark									No germination.
<u>Oxytropis campestris</u> aap. <u>aoida</u>										
T07192	Norway									No germination.
<u>Penstemon digitalis</u> Foug.										
T07193	Pennsylvania									No germination.

1979 Performance - Others (cont'd.)

Code:

A = annual	M = medium	Sf = soft	1 = excellent	Example: 150-100x70
Ab = abundance	P = perennial	So = solitary	3 = good	150 = seedhead height
B = bunch	Pr = prostrate	Tx = texture	5 = fair	100 = foliage height
Er = erect	R = rhizomatous		7 = poor	70 = foliage width & foliage height
H = harsh	S = sod-forming		9 = none	

PI or T Number	Source	Transplant Date	Habit	Vigor	Foliage		----Seeding Habits----			Measure(cm)	Remarks
					Ab	Tx	Amt.	Fill	Mat.		
<u>Phlox speciosa</u>											
T07046											No germination.
<u>Roas species</u>											
370208	Yugoslavia										No germination.
370209	Yugoslavia										No germination.
381013	Iran										No germination.
383745	Turkey										No germination.
<u>Saponaria officinalis L.</u>											
T07088	Denmark										No germination.
Undetermined											
383813	Turkey										No germination.

